



SSC CGL 2015 Tier 1 - 16 Aug

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in any retrieval system of any nature without the permission of cracku.in, application for which shall be made to support@cracku.in

General Awareness

Instructions

For the following questions answer them individually

Question 1

The substrate of Photorespiration is :

- A Fructose
- B Pyruvic acid
- C Glycolate
- D Glucose

Answer: C

SSC CGL Free Mock Test

Question 2

In mountainous areas a natural cause for road blocks is often :

- A road repairs and construction
- B land slides
- C tree felling
- D traffic congestion

Answer: B

Question 3

Match the following :

I	II
A. Chlorophyll	1. Plant disease
B. Nostoc	2. Photosynthetic
C. Transpiration	3. Diazotroph
D. Rust of wheat	4. Loss of water from plant surface

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

Answer: C

Question 4

Match the following :

I	II
Crops	First in the world
A. Rice	1. Brazil
B. Maize	2. Malaysia
C. Rubber	3. China
D. Sugarcane	4. U.S.A

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

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

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

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

Answer: C

SSC CGL Previous Papers (DOWNLOAD PDF)

Question 5

Movement of people from a village to a small town and later to a city is known as :

A intra-state migration

B step-wise migration

C inter-state migration

D forced migration

Answer: B

Question 6

The purpose of choke in a fluorescent lamp is :

A to increase the current flow

B to decrease the current flow

C to decrease the resistance

D to decrease the voltage momentarily

Answer: B

Question 7

Headquarter of European Union (EU) is situated in :

A Paris (France)

B Munich (Germany)

C Brussels (Belgium)

D Milan (Italy)

Answer: C

SSC CGL Tier-2 Previous Papers PDF

Question 8

The Thirteenth Pravasi Bhartiya Divas was held on 8th and 9th January 2015 at:

- A Indore
- B Bangaluru
- C New Delhi
- D Gandhinagar

Answer: D

Question 9

Who was the Nawab of Bengal during "Battle of Plassey"?

- A Mir Jafar
- B Mir Qasim
- C Siraj-ud-duala
- D None of these

Answer: C

Question 10

In the case of deadlock between the two houses parliament, the joint sitting is presided over by the :

- A President
- B Senior most member of Lok Sabha
- C Speaker of Lok Sabha
- D Vice President .

Answer: C

SSC CGL Important Questions PDF

Question 11

The Man Booker Prize for 2014 is awarded to :

- A Arnritha Pritarn
- B Shashi Tharoor
- C Lech Walesa
- D Richard Flanagan

Answer: D

Question 12

The National Police Academy is located at :

- A** Dehradun
- B** Hyderabad .
- C** Bangalore
- D** Abu Road

Answer: B

Question 13

The mercury and sodium street lamps light up because of :

- A** Atomic emission
- B** Atomic absorption
- C** Electron emission
- D** Electron absorption

Answer: A

1500 + Free Must Solved SSC Questions (With Solutions)

Question 14

A person can jump higher on the moon's surface than on the earth because :

- A** the moon's surface is rough
- B** the acceleration due to gravity in moon is smaller than that on the earth.
- C** the moon is cooler than earth
- D** the moon has no atmosphere

Answer: B

Question 15

"Wall Street" is the name of the :

- A** Stock Exchange of New York
- B** Indian Township in Washington
- C** Super market in Mumbai
- D** Stock Exchange of kolkata

Answer: A

Question 16

Kautilya's "Arthashastra" mainly deals with

- A Political state craft
- B Social aspects
- C Economic doctrines
- D Military aspects

Answer: A

General Science Notes for SSC CGL

Question 17

Who became a member of the “Din-illahi”?

- A Todarmal
- B Birbal
- C Raja Man Singh
- D Tansen

Answer: B

Question 18

Which one of the following is not a feature of Indifference Curve?

- A They do not intersect each other
- B They slope downwards to the right
- C They are parallel to each other
- D They are concave to each other

Answer: D

Question 19

What is the name of the white salt which covers the land in some areas during dry season?

- A usar
- B reh
- C erg
- D reg

Answer: B

Free SSC Study Material (18,000 Solved Questions)

Question 20

The first Sultan of Delhi to issue regular currency and declare Delhi as the capital of his empire was

- A Iltutmish
- B Alam Shah
- C Qutbuddin Aibak
- D Balban

Answer: A

Question 21

The soft silvery metallic element which ionizes easily when heated or exposed to light and is present in atomic clocks is

- A Cerium
- B Cesium
- C Calcium
- D Californium

Answer: B

Question 22

Which one of the following is an indigenously built light combat aircraft of India?

- A Ajay
- B Multirol
- C Arjun
- D Vikrant

Answer: D

SSC Exam Free Videos (Youtube)

Question 23

Which of the following is not correct about Mahatma Gandhi?

- A Gandhi advocated complete separation of politics from religion.
- B Gandhi believed in nonviolence
- C Gandhi believed in the sanctity of means.
- D Gandhi supported close relation between religion and politics.

Answer: A

Question 24

The only AICC session Gandhiji presided was held at :

- A Calcutta

- B Madras
- C Belgaum
- D Lahore

Answer: C

Question 25

The Indian Constitution provides the country with three categories of civil services, namely :

- A all India, central and state services
- B administrative, railway and police services
- C administrative, police and revenue services
- D administrative, police and foreign services

Answer: D

SSC Free Preparation App

Question 26

B-Diversity is also known as :

- A Within habitat diversity
- B Ecosystem diversity
- C Global diversity
- D Between habitat diversity

Answer: B

Question 27

In a Database Management System (DBMS), the content and the location of the data is defined by the .

- A Multi Dimensional data
- B Sequence data
- C Meta data
- D Sub data

Answer: C

Question 28

Example of an animals i.e, jawless :

- A Sphyrna
- B Trygon
- C Myxine

D Shark

Answer: C

Daily Free SSC Practice Set

Question 29

Competition for food, light and space is most severe in:

- A** Distantly related species growing in different habitats
- B** Closely related species growing in the same area or niche
- C** Closely related species growing in different habitats
- D** Distantly related species growing in the same habitats

Answer: B

Question 30

What is Amnesty International?

- A** An Animal Rights Protection Organization
- B** A peace Movement
- C** An Environment Protection Organization
- D** A Human Rights Organization

Answer: D

Question 31

Rotation of crops is essential :

- A** For increasing the quantity of minerals.
- B** For decreasing the quantity of proteins.
- C** For getting different kinds of crops.
- D** For increasing fertility of the soil.

Answer: D

SSC CGL Free Online Coaching

Question 32

Catalytic converters are generally made from :

- A** Alkaline metals
- B** Hydrogen
- C** Transition metals
- D** Carbon

Answer: C

Question 33

The green colour seen in firework displays is due to the chloride salt of :

- A Sodium
- B Strontium
- C Barium
- D Calcium

Answer: C

Question 34

The difference in the value of visible exports and visible imports is called :

- A Balance Sheet of items
- B Balance of Payments
- C Balance of Trade
- D Balance of Account

Answer: C

SSC CHSL Previous Question papers (download pdf)

Question 35

Which country has the longest overland tunnel?

- A Germany
- B Switzerland
- C Spain
- D France

Answer: B

Question 36

Addition of excessive amounts of heat to a lake is referred to as :

- A Refrigeration effect
- B Green House effect
- C Thermal pollution
- D Heat Bloom

Answer: C

Question 37

The apparent weight of a man in a lift is less the real weight when :

- A** the lift is going up with an acceleration
- B** the lift is going down with uniform speed
- C** the lift is going up with uniform speed
- D** the lift is going down with an acceleration

Answer: D

SSC CPO Previous Question papers (download pdf)

Question 38

The remedies to soil erosion are :

- I. Contour bunding**
- II. Regulation of land use**
- III. Cutting of trees**
- IV. Allowing grazing of animals**

- A** I, III
- B** I, II
- C** III, IV
- D** II, III

Answer: B

Question 39

Afla toxins are produced by

- A** Bacteria
- B** Algae
- C** Viruses
- D** Fungi

Answer: D

Question 40

What according to Communism is the chief enemy of the society?

- A** Private property
- B** Religion
- C** Surplus value
- D** Capitalist class

Answer: A

SSC GD Previous Question papers (download pdf)

Question 41

Which one of the following is the infective stage of the Malarial Parasite?

- A schizont
- B trophozoite
- C sporoblast
- D sporozoite

Answer: D

Question 42

Jaspal Rana is the name associated with which game :

- A Shooting
- B Weight lifting
- C Boxing
- D Archery

Answer: A

Question 43

One of the regions that receives rainfall from the North-Eastern monsoon is :

- A West Bengal
- B Assam
- C Kerala
- D Tamil Nadu

Answer: D

SSC MTS Previous Question papers (download pdf)

Question 44

The author of the book "Zest for Life" is :

- A Emile Zola
- B H.G. Wells
- C Virginia Woolf
- D Mark Twain

Answer: A

Question 45

When income increases, consumption also increases :

- A in a lower proportion
- B in a higher proportion
- C in the same proportion
- D None of the options

Answer: A

Question 46

Rainbows are produced when sunlight :

- A Incident on rain drops hanging in the atmosphere is dispersed after suffering refraction
- B Incident on rain drops hanging in the atmosphere is dispersed after suffering refraction and internal reflection.
- C Incident on raindrops hanging in the atmosphere is dispersed after suffering reflection.
- D None of the given statements is correct.

Answer: B

SSC Stenographer Previous Question papers (download pdf)

Question 47

From the national point of view which of the following indicates Micro Approach?

- A Per capita income in India
- B Study of sales of TISCO
- C Inflation in India
- D Educated Unemployment in India

Answer: B

Question 48

Ecosystem consists of :

- A A biotic community and its non-living elements
- B Population
- C A population and its nonliving elements
- D A biotic community

Answer: A

Question 49

What is the speciality of WINDOWS-NT?

- A supports real-time processing
- B supports LAN and WAN
- C supports Batch processing
- D supports multi-processing

Answer: D

SSC CHSL Free Mock Test

Question 50

Which comes under the jurisdiction of both the High Court and the Supreme Court?

- A Disputes between the states inter se
- B Protection against the violation of the Constitution
- C Protection of Fundamental Rights
- D Disputes between Centre and the States

Answer: C

SSC MTS Free Mock Test

English

Instructions

In the following questions, you have a brief passage with five questions following the passage. Read the passage carefully and choose the best answer to each question out of the four alternatives.

True, it is the function of the army to maintain law and order in abnormal times. But in normal times there is another force that compels citizens to obey laws and to act with due regard to the rights of others. The force also protects the lives and properties of law abiding men. Laws are made to secure the personal safety of its subjects and to prevent murder and crimes of violence. They are made to secure the property of the citizens against theft and damage and to protect the rights of communities and castes to carry out their customs and ceremonies, so long as they do not conflict with the rights of others. Now the good citizen, of his own free will obeys these laws and he takes care that everything he does is done with due regard to the rights and well being of others. But the bad citizen is only restrained from breaking these laws by fear of the consequence of his action. And the necessary steps to compel the bad citizen to act as a good citizen are taken by this force. The supreme control of law and order in a state is in the hands of a Minister, who is responsible to the state Assembly and acts through the Inspector General of Police.

Question 51

Which of the following statements is not implied in the passage ?

- A The forces of law help to transform irresponsible citizens into responsible ones.
- B Law protects those who respect it
- C Law ensures people's religious and social rights absolutely and unconditionally.

D A criminal is deterred from committing crimes only for fear of the law

Answer: C

SSC CPO Free Mock Test

Question 52

The expression “customs and ceremonies” means :

- A fairs and festivals
- B superstitions and formalities
- C habits and traditions
- D usual practices and religious rites

Answer: D

Question 53

They are made to secure the property of citizens against theft and damage” means that the law :

- A helps in recovering the stolen property of the citizens.
- B safeguards people’s possessions against being stolen or lost.
- C initiates process against offenders of law.
- D assists the citizens whose property has been stolen or destroyed.

Answer: B

Question 54

Which one of the following statement is implied in the passage ?

- A Criminals, who flout the law, are seldom brought to book
- B The police check the citizens, whether they are good or bad, from violating the law.
- C The police hardly succeed in converting bad citizens into good ones.
- D Peaceful citizens seldom violate the law

Answer: B

SSC GD Free Mock Test

Question 55

According to the writer, which one of the following is not the responsibility of the police ?

- A To protect the privileges of all citizens.
- B To maintain peace during extraordinary circumstances.
- C To ensure peace among citizens by safeguarding individual rights.
- D To check violent activities of citizens.

Answer: B

Instructions

In the following questions, out of the four alternatives, choose the one which can be substituted for the given words/sentence.

Question 56

A study of ancient things.

- A Physiology
- B Archaeology
- C Ethnology
- D Zoology

Answer: B

Question 57

A person who deserves all praise.

- A detestable
- B lovable
- C despicable
- D laudable

Answer: D

SSC Stenographer Free Mock Test

Question 58

One who is skillful.

- A disciplined
- B diligent
- C different
- D dexterous

Answer: D

Question 59

One who runs away from justice or the law.

- A Smuggler
- B Criminal
- C Fugitive
- D Thief

Answer: C

Question 60

Of one's own free will.

- A mandatory
- B obligatory
- C voluntary
- D compulsory

Answer: C

Free SSC Study Material (18,000 Solved Questions)

Question 61

One who is too careless to plan for the future.

- A imprudent
- B impractical
- C impotent
- D improvident

Answer: D

Question 62

One who has long experience.

- A novice
- B expert
- C veteran
- D practitioner

Answer: C

Instructions

In the following questions, some parts of the sentences have errors and some are correct. Find out which part of a sentence has an error.

The number of that part is the answer. If a sentence is free from error, your answer is No error.

Question 63

Who do you think I met ?

- A Who
- B No error
- C do you think

D I met ?

Answer: A

Explanation:

The error is in the part A.

Replace `who' with `whom'.

Who -Subjective/ Nominative case

Whom - objective / Accusative case

The case of the relative pronoun depends upon its relation to the verb in the clause in which it occurs.

Ex- The man whom I met yesterday ,is a great Painter.

-The girl who is sitting there is our classmate.

So correct answer will be Option A.

Download SSC General Knowledge PDF

Question 64

Just outside my house are a playground for school boys and girls.

A Just outside my house

B are a playground

C No error

D for school boys and girls

Answer: B

Explanation:

The error is in the part -B.

Replace `are' with `is'.

Playground - is a singular noun

So helping verb should agree with the the noun.

Question 65

He can be a basketball player since he is tall like a mule.

A He can be

B he is tall like a mule

C No error

D a basketball player since

Answer: B

Explanation:

The error is in the part B

Mule -It is a hybrid offering of male donkey & female horse.

So it is not the appropriate word- it doesn't indicate height.Or we can say it is not having `height' as a his attribute.

The correct simile is

As tall as giraffe.

So correct sentence will be-

He can be a basketball player since he is tall like a giraffe.

Question 66

It is not advisable to take heavy luggages while on a journey.

- A to take heavy luggages
- B while on a journey
- C No error
- D It is not advisable

Answer: A

Explanation:

The error is in the part -A

Replace `luggages' with `luggage'.

Luggages - this doesn't exist.

Luggage - Is a uncountable noun. It will be used always in singular form.

Luggage - It means bags & other containers.

Nouns which have only a **singular form** include the following: furniture, wheat, happiness, scenery, news, information, **luggage**, bread, advice etc. Nouns which have only a **plural form** include the following: police, cattle, oats, tweezers, pants, remains etc.

It is not advisable to take heavy **luggage** while on a journey.

Download SSC Current Affairs Quiz PDF

Question 67

A bird in the tree is worth two in the bush.

- A A bird in the tree
- B two in the bush.
- C No error
- D is worth

Answer: A

Explanation:

The error is in the part -A.

The correct idiom is - "a bird in the hand is worth two in the bush".

Meaning of a bird in the hand -

Something of some value that is already acquired. Taken from the proverb "a bird in the hand is worth two in the bush," which means that having something, even if it is a lesser quantity, is better than taking the chance of losing it in order to attain something else that seems more desirable.

Instructions

In the following questions, choose the word opposite in meaning to the given word.

Question 68

Placid

- A urgent
- B dull
- C moving
- D stormy

Answer: D

Question 69

VACILLATION

- A steadfastness
- B relief
- C inoculation
- D remorse

Answer: A

Daily Current Affairs PDF for SSC

Question 70

Effeminacy

- A aggressiveness
- B attractiveness
- C manliness
- D boorishness

Answer: C

Instructions

In the following questions, a sentence/ part of the sentence is printed in bold. Below are given alternatives to the bold sentence/part of the sentence, which may improve the sentence. Choose the correct alternative. In case no improvement is needed, your answer is No improvement.

Question 71

If I will get an opportunity, I shall attend the seminar.

- A get
- B got
- C No Improvement
- D shall get

Answer: A

Explanation:

The correct answer is option -A

The above sentence is showing probable or likely conditions.

So order of the sentence will be

Simple present tense , modal auxiliary verb.

| |
1st part of sentence. 2nd part of sentence

The correct sentence will be

If I get an opportunity, I shall attend the seminar.

Question 72

Both the teams played the game fairly.

- A No Improvement
- B played a fair game
- C played fairly the game
- D fairly played the game

Answer: B

Explanation:

The correct answer is option -B

Here, 'fair' is an adjective which qualifies the noun 'game'.

Usage of 'fairly' is wrong here.

Fairly - is an adverb which will qualify verb 'played'.

Since in sentence, 'the game -noun is used.

To qualify that we will use adjective.

If we look at the context/meaning usage of Adjective 'fair' is correct.

Ex- Both the teams **played** fairly.

Here it qualifies verb, so we use fairly (adverb)

Meaning-both the teams played in a fair manner.

Ex- Both the teams played a fair **game**.

Meaning -both the teams played a good, pure game. (no cheating, breaking of rules etc).

Daily Free Online GK tests

Question 73

She could not help but laugh.

- A but laughing
- B laughter
- C No Improvement
- D laughing

Answer: C

Explanation:

The given sentence is correct.

Here the sentence implies that she couldn't help but can't resist herself from laughing.

The 1st option but laughing -

Is incorrect here. in the given sentence, 'help' is used as a noun so we have to use same form of the verb after but.

2nd Option-

Laughter - though it is a noun, meaning is different. It means the sound of laughing.

3rd option laughing

It is the present participle of 'laugh'

Question 74

We met yesterday, haven't we ?

- A didn't we ?
- B No Improvement
- C hadn't we ?
- D isn't it ?

Answer: A

Explanation:

The correct answer is option -A.

The given question is of question tag.

The sentence is in simple past tense .

While making the question tag of simple past tense, we use auxiliary verb 'did'.

As the given sentence is in negative form, questions I tag will be positive.

Question 75

I took my mother some grapes when she was in hospital.

- A I took for my mother some grapes.
- B I brought my mother some grapes
- C I took some grapes for my mother
- D No Improvement

Answer: C

Explanation:

The correct answer is option -C

Some grapes is a direct object which should be placed after verb.

Some grapes -I took **some grapes**, *not my mother*.

So it should be placed after the verb to which it qualifies.

Order of the sentence should be I took some grapes for my mother

Ex- I bought for my friend some books.

It should be I bought some books for my friend.

Latest Job Updates on Telegram - Join here

Question 76

The others shook their heads and made vague noises of approval.

- A hung
- B turned around
- C No Improvement
- D nodded

Answer: D

Explanation:

The correct answer is option -D.

Shook (past form of shake)-shocked & upset by an unpleasant experience.

The correct word should be- nodded

Nodded-(past & past participle of nod)to move your head down and then up, sometimes several times, especially to show agreement, approval, or greeting.

If we look at the context,the correct word should be nodded.

Question 77

She insisted on she was innocent.

- A insisted on that
- B No Improvement
- C insisted that
- D insisted with

Answer: C

Explanation:

The correct answer is option -C

Insisted on -To ask for something,to request someone.demand something forcefully,

Or to go on, follow through.

Insisted that - we use insisted that when no verb comes immediately after (insisted that)

Insisted that will be followed by pronoun.

Here in this sentence -It is followed by pronoun `She'.

Insisted on usually precede the verb.

For ex- Shyam insisted on coming to Pune.

Here `insisted on' followed by `coming'(present participle of come).

Question 78

The world is being faced with a crisis

- A confronted
- B in front of
- C No Improvement
- D facing

Answer: D

Explanation:

The correct answer is option -D

The sentence seems to imply a general statement that world is facing a crisis.

The given sentence is in the past continuous tense (in passive form).

Here we want to say the current happening.

Present continuous tense -It is used to show an action happening at the time of speaking.

It is also used to denote temporary action not necessary happening at the moment of speaking.

SSC CGL Free Mock Test

Question 79

You must endure what you cannot cure.

- A accept
- B suffer
- C prevail
- D No Improvement

Answer: D

Explanation:

The correct answer is -D

The given sentence is correct.

Endure -to tolerate,to continue,carry on.

Prevail -to be superior in strength, dominance, influence,to be current widespread,to succeed in persuading.

Accept - to receive with a consent,to admit,to agree,to admit

Suffer-to feel pain,to undergo hardship.

Here sentence implies that one must go through or tolerate which can't be cured.

Question 80

He does not laugh, nor he smiles.

- A nor he does smile
- B neither he does smile
- C nor does he smile

D No Improvement

Answer: C

Explanation:

The correct answer is option -C

The quantifiers Like 'neither nor, either or ' should follow the same grammatical usage i. e., The form of tense used with **neither** should also be used with **nor**.

In the given sentence first part denotes 'does + verb '. Thus, the second part should be in the 'nor 'does + verb' form. So, 'nor does he' is the correct answer.

Instructions

In the following questions, four words are given in each question, out of which only one word is correctly spelt. Find the correctly spelt word.

Question 81

A Deffusion

B Delusion

C Diffussion

D Diffusion

Answer: D

SSC CGL Previous Papers (DOWNLOAD PDF)

Question 82

A Circumlocution

B Circumlocation

C Circurnlocuben

D Ciremlocution

Answer: A

Instructions

In the following questions, four alternatives are given for the Idiom/ Phrase printed in bold in the sentence. Choose the alternative which best expresses the meaning of the Idiom/Phrase.

Question 83

Instead of keeping his promise of helping me with office work, he just left me high and dry.

A left me without a drop of water

B left me in a state of anger

C left me alone to do the work

D left me feeling like a fool

Answer: C

Question 84

Unless you make amends for the loss, nobody is prepared to excuse you.

- A improve
- B confess
- C compensate
- D pay debt

Answer: C

SSC CGL Tier-2 Previous Papers PDF

Question 85

Before the report reached the authority, the media spilled the beans.

- A hinted at the consequences.
- B dropped the charges
- C spilled the content of the package
- D revealed the secret information

Answer: D

Question 86

Amit said to Rekha, "Don't make a mountain out of a mole hill."

- A exaggerate a minor problem
- B attempt an impossible task
- C create problems
- D start looking for mole hills in mountains.

Answer: A

Question 87

His friend turned out to be snake in the grass.

- A cowardly and brutal
- B a hidden enemy
- C an unreliable and deceitful person
- D low and mean

Answer: C

SSC CGL Important Questions PDF

Instructions

In the following questions, out of the four alternatives, choose the one which best expresses the meaning of the given word.

Question 88

PERUSE

- A** Read
- B** Argue
- C** Follow
- D** Reduce

Answer: A

Question 89

SPUME

- A** Spit
- B** poison
- C** Lava
- D** foams

Answer: D

Question 90

BOARD

- A** Food
- B** Furniture
- C** Lodging
- D** Frame

Answer: A

1500 + Free Must Solved SSC Questions (With Solutions)

Instructions

In the following questions, you have a brief passage with 5 questions following the passage. Read the passage carefully and choose the best answer to each question out of the four alternatives.

Journalists argue over functions of a newspaper. I feel that a provincial paper's purpose is not only to present and project the news objectively and imaginatively, but to help its readers to express themselves more effectively, canalizing their aspirations, making more articulate their demands. A newspaper should reflect the community it serves - warts and all. When the mirror is held to society it reveals neglect, injustice, ignorance or complacency. It should help to eradicate them. It would be pretentious to think that a newspaper can change the course of world affairs - but at the local limit it can exert influence, it can probe, it can help get things done. The individual's voice must not be stifled. Instead, the readers should be encouraged to express their opinions, fears, hopes, and their grievances on this Platform.

Question 91

How can a newspaper influence local affairs ?

- A By focusing on world affairs.
- B By influencing public opinion through half truths.
- C By encouraging the readers to accept their grievances.
- D By probing into the ills of society and rallying support for change.

Answer: D

Question 92

How can the readers air their grievances ?

- A By writing to journalists.
- B By supporting the local newspaper
- C By writing to their local newspaper
- D By being complacent

Answer: C

Question 93

In this passage the writer highlights the fact that :

- A Journalists differ in their opinion on the function of a newspaper
- B A newspaper should reflect the community it serves.
- C A newspaper should only concentrate on local affairs.
- D Newspaper can eradicate injustice.

Answer: B

General Science Notes for SSC CGL

Question 94

The expression "warts and all" in the passage means :

- A hopes and fears
- B with no attempt to conceal blemishes and inadequacies
- C the community's problems
- D the reader's grievances

Answer: D

Question 95

What is the main purpose of a newspaper ?

- A Encourage the readers to be pretentious.
- B Project news objectively and imaginatively.

- C To present facts in a blunt-way
- D Exert influence on the individuals.

Answer: D

Instructions

In the following questions, sentences are given with blanks to be filled in with an appropriate word(s). Four alternatives are suggested for each question. Choose the correct alternative out of the four as your answer.

Question 96

The police fired on the mob when they

- A turned violent
- B fizzled out
- C became abusive
- D turned noisy

Answer: A

Free SSC Study Material (18,000 Solved Questions)

Question 97

He has the full factsbut is deliberately hiding them.

- A up his sleeve
- B under his sleeveS
- C upon his sleeves
- D in his sleeves

Answer: A

Question 98

The appearance of the cityday by day.

- A changed
- B is changing
- C had changed
- D could change

Answer: B

Question 99

When the morningthe murder was discovered.

- A arrived
- B came

- C occurred
- D happened

Answer: A

SSC Exam Free Videos (Youtube)

Question 100

The smell of the Sea called..... memories of her child-hood.

- A for
- B back
- C up
- D on

Answer: C

SSC Free Preparation App

Reasoning

Instructions

In each of the following questions, one or two statements is/are given followed by two conclusions /assumptions, I and II. You have to consider the statement to be true, even if it seems to be at variance from commonly known facts. You are to decide which of the given conclusions/assumptions can definitely be drawn from the given statement.

Question 101

Statement : A good book even if costly is sold out in no time.

Assumptions :

- I. Some books are better than others.
- II. All good books are costly.

- A Only II follows.
- B Both I and II follows.
- C Only I follows.
- D Neither I nor II follows.

Answer: C

Explanation:

The statement talks about a 'good' book. This means that some books may not be good. So, I is implicit. The words 'if costly' show that most books are not costly. So, II is not implicit.

Thus, only I follows.

=> Ans - (C)

Daily Free SSC Practice Set

Question 102

Statements : No rod is pod. No pod is flexible.

Assumptions :

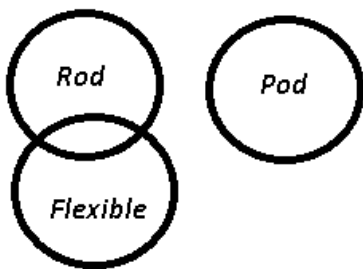
- I. No rod is flexible.**
- II. Some pods are flexible.**

- A** Neither of them follows.
- B** Only inference I follows.
- C** Both of them follow.
- D** Only inference II follows.

Answer: A

Explanation:

The venn diagram for above statements is :



Assumptions :

- I. No rod is flexible = false
- II. Some pods are flexible = false

Thus, neither of them follows.

=> Ans - (A)

Instructions

For the following questions answer them individually

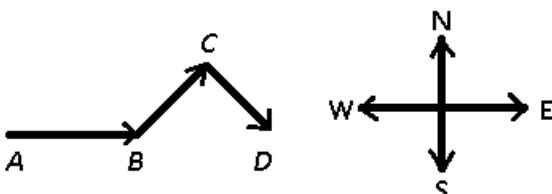
Question 103

Ravi is walking in the East direction. After covering a distance of one kilometre, he turns 45° left and then 90° right. In which direction is he facing now?

- A** South-East
- B** West
- C** North-West
- D** North

Answer: A

Explanation:



Let Ravi started from point A and walked east for 1 km to reach B, then he turned 45° left to reach C and finally

stopped at point D after turning 90° right.

Thus, he is facing South-east direction.

=> Ans - (A)

Instructions

In each of the following questions, find the odd word/letters/number from the given alternatives.

Question 104

A B S

B E V

C I Z

D D X

Answer: D

Explanation:

(A) : B (+17 letters) = S

(B) : E (+17 letters) = V

(C) : I (+17 letters) = Z

(D) : D (+20 letters) = X

=> Ans - (D)

SSC CGL Free Online Coaching

Question 105

A OKRA

B ERKU

C ANDI

D PERU

Answer: D

Explanation:

In the first three options, the first and last alphabets are both vowels, but this pattern is not observed in the last option, hence PERU is the odd one out.

=> Ans - (D)

Question 106

A 1331

B 191

C 200

D 808

Answer: A

Explanation:

Among the given numbers, only 1331 is a perfect cube, hence it is the odd one out.

$$1331 = 11^3$$

=> Ans - (A)

Question 107

- A Legislator
- B Lawyer
- C Mayor
- D Governor

Answer: B

Explanation:

Legislator, mayor and governors are members of high authority of legislative body, hence a lawyer is the odd one out.

=> Ans - (B)

SSC CHSL Previous Question papers (download pdf)

Question 108

- A 37
- B 120
- C 145
- D 50

Answer: B

Explanation:

If 1 is subtracted from each number, the number obtained is perfect square.

(A) : $37 - 1 = 36 = 6^2$

(B) : $120 - 1 = 119 = \text{not a perfect square}$

(C) : $145 - 1 = 144 = 12^2$

(D) : $50 - 1 = 49 = 7^2$

=> Ans - (B)

Question 109

- A Parallel
- B Acute
- C Obtuse
- D Right

Answer: A

Explanation:

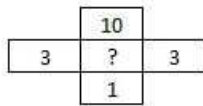
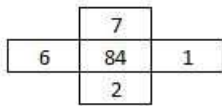
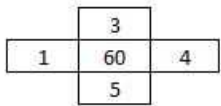
Acute, obtuse and right are properties of angles and triangles, while parallel is the property of pair of lines.

=> Ans - (A)

Instructions

In each of the following questions, select the missing number from the given responses.

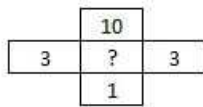
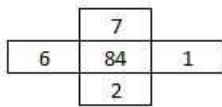
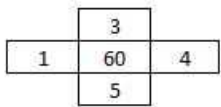
Question 110



- A 90
- B 12
- C 48
- D 16

Answer: A

Explanation:



Here in every pattern the middle term is product of all terms surrounding it

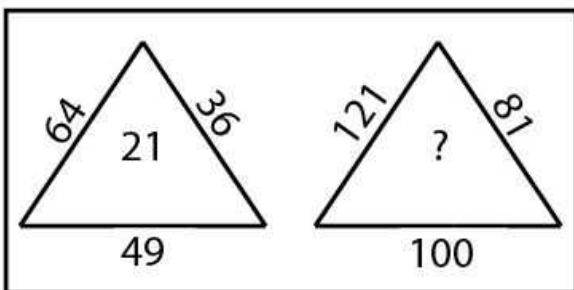
for example , $60 = 1 \times 3 \times 4 \times 5$

$84 = 6 \times 7 \times 1 \times 2$

and hence the missing term in third pattern is $= 3 \times 10 \times 3 \times 1 = 90$

SSC CPO Previous Question papers (download pdf)

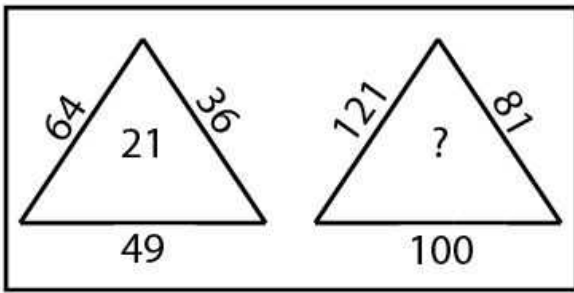
Question 111



- A 10
- B 20
- C 30
- D 40

Answer: C

Explanation:

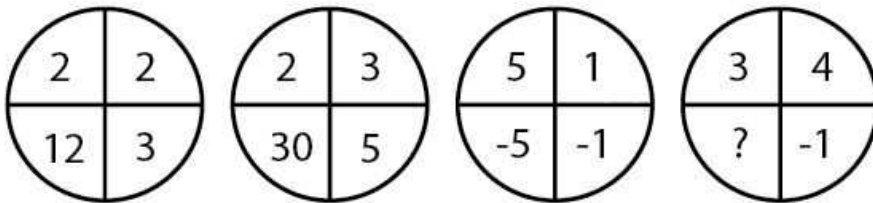


in this question let the missing term be y

here , $21 = \sqrt{(64)} + \sqrt{(49)} + \sqrt{(36)}$

hence , $y = \sqrt{(121)} + \sqrt{(100)} + \sqrt{(81)} = 30$

Question 112



A -12

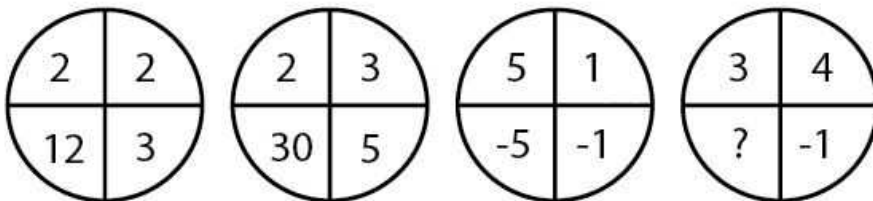
B 9

C 7

D 12

Answer: A

Explanation:



let the missing term be y

here in every figure ,

$12 = 2 \times 2 \times 3$

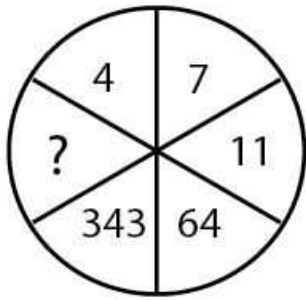
$30 = 2 \times 3 \times 5$

$-5 = 5 \times 1 \times -1$

and hence,

$y = 3 \times 4 \times -1 = -12$

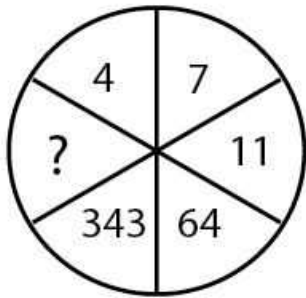
Question 113



- A 1321
- B 1231
- C 1332
- D 1331

Answer: D

Explanation:



Let the missing term be y
in this figure we can see that

$$64 = 4^3$$

$$343 = 7^3$$

$$\text{and hence } y = 11^3 = 1331$$

[SSC GD Previous Question papers \(download pdf\)](#)

Question 114

- I. 40 32 72 12
- II. 30 24 54 9
- III. 54 ? 90 15

- A 46
- B 49
- C 48
- D 36

Answer: D

Explanation:

here the given pattern is I. 40 32 72 12
II. 30 24 54 9

III. 54 ? 90 15

let the missing term be y

as we can see that in 1st pattern

$$72 = 40 + 32$$

in 2nd pattern $54 = 30 + 24$

and hence in 3rd pattern

$$90 = y + 54$$

$$y = 36$$

Instructions

In each of the following questions, select the related word/letters/number from the given alternatives.

Question 115

FIG : EGHJFH :: BIN : ?

- A ACJHMO
- B CAHJMOC
- C CAJHOM
- D ACHJMO

Answer: D

Explanation:

Expression = FIG : EGHJFH :: BIN : ?

The pattern followed is that the preceding and next alphabets of each letter is written on the right side.

Eg : Neighbours of F = EG

Neighbours of I = HJ

Neighbours of G = FH

Thus, FIG : EGHJFH

Similarly, B = AC , I = HJ and N = MO

=> BIN : ACHJMO

=> Ans - (D)

Question 116

Garbage : House :: Gangue : ?

- A Ore
- B Drugs
- C Factory
- D Office

Answer: A

Explanation:

The waste material of a house is called garbage and the waste of an ore is gangue.

=> Ans - (A)

SSC MTS Previous Question papers (download pdf)

Question 117

6 : 42 :: 7 : ?

- A 40
- B 56
- C 48
- D 52

Answer: B

Explanation:

Expression = 6 : 42 :: 7 : ?

The pattern followed is = $n : n^2 + n$

Eg = $6 : 6^2 + 6 = 6 : 42$

Similarly, $7^2 + 7 = 49 + 7 = 56$

=> Ans - (B)

Question 118

12 : 72 :: 8 : ?

- A 37
- B 38
- C 40
- D 32

Answer: D

Explanation:

Expression = 12 : 72 :: 8 : ?

The pattern followed is = $n : \frac{n^2}{2}$

Eg = $12 : \frac{12^2}{2} = 12 : 72$

Similarly, $\frac{8^2}{2} = \frac{64}{2} = 32$

=> Ans - (D)

Question 119

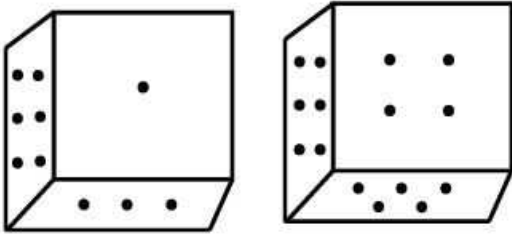
DBU : EEZ :: CJH : ?

- A D N N
- B D M N
- C D M M
- D D N M

Answer: C

Question 121

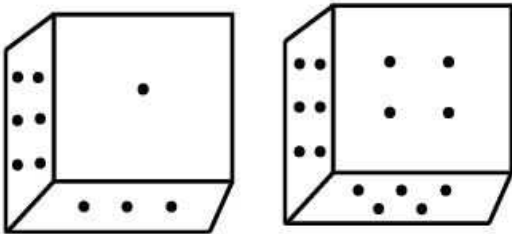
Two positions of a dice are shown below. When three is at the top what number will be at the bottom ?



- A 2
- B 1
- C 4
- D 5

Answer: D

Explanation:



From the 2 positions of dice it is clear that,
No. 6 has its adjacent as no. 1,3,4,5.
Hence, No. 2 is opposite to No. 6.
Rotate the dice from 1st position along face having No. 6 twice,
We get second position.
Hence No. 1 is opposite to No. 4.
Therefore No. 3 must be opposite to No. 5.
Hence, when No. 3 is at the top No. 5 will be at the bottom.
Therefore, Option D is correct.

Question 122

From the given alternative words, select the word which cannot be formed using the letters of the given word. 'BOOKBINDING'

- A DINING
- B BONDING
- C DOING
- D DIGGING

Answer: D

Explanation:

The word BOOKBINDING does not contain 3 G's, and thus the word 'Digging' cannot be formed.

=> Ans - (D)

SSC CHSL Free Mock Test

Question 123

Which answer figure will complete the question figure?



A



B



C

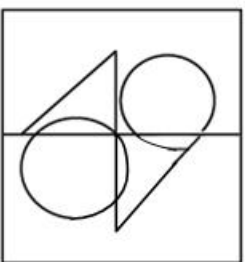


D



Answer: C

Explanation:



is the complete figure.
only Option C,

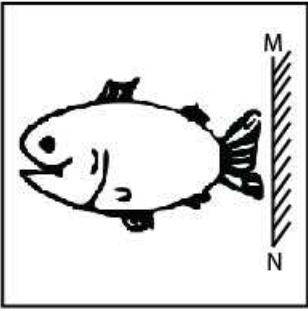


fits the figure.
Hence, Option C is correct.

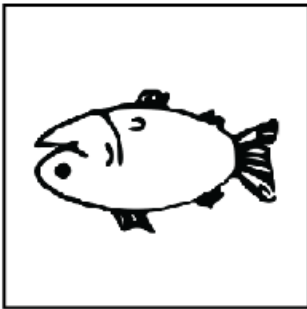
Instructions

In each of the following questions, which answer figure will complete the pattern in the question figure?

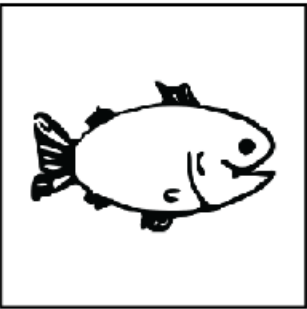
Question 124



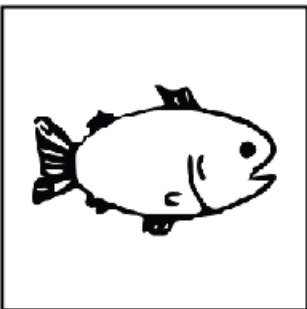
A



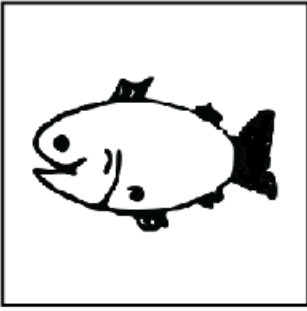
B



C



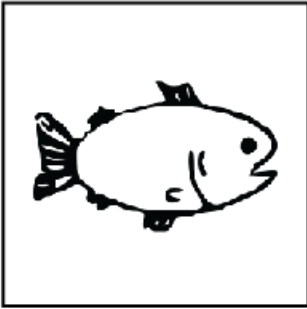
D



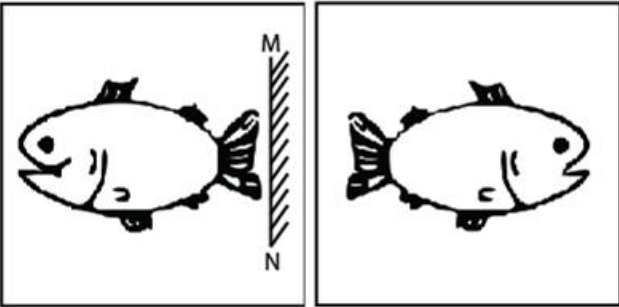
Answer: C

Explanation:

A mirror image in a plane mirror is a reflection of an object that appears almost identical but is reversed in the direction perpendicular to the mirror surface.

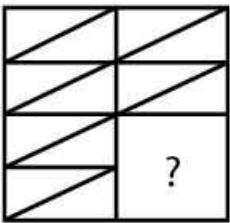


fits the figure.

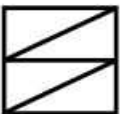


Hence, Option C is the correct answer.

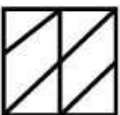
Question 125



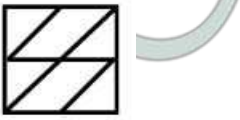
A



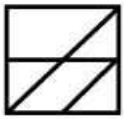
B



C

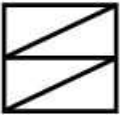


D

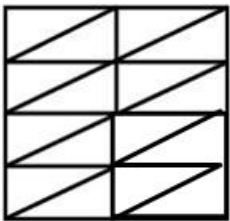


Answer: A

Explanation:



fits the figure in question.



Hence, Option A is the correct answer.

SSC MTS Free Mock Test

Instructions

For the following questions answer them individually

Question 126

Find the number that is common for all of the clues given below :

- (a) Virgo
- (b) Volleyball
- (c) A highest scoring shot of a particular sport
- (d) Extra sensory perceptions

A 8

B 2

C 6

D 4

Answer: C

Explanation:

Virgo is the 6th astrological sign in zodiac.

In volleyball, there are 6 players in a team.

In Cricket, highest scoring shot fetches 6 runs.

6th sense is commonly known as Extra sensory perceptions.

So, all options have no. 6 as common.

Hence, Option C is the correct answer.

Question 127

If the words are organised in reverse order of what they appear in dictionary, which word will come in the third place.

- A Odium
- B Ordeum
- C Occulist
- D Odious

Answer: D

Explanation:

Organising words in reverse order,

A-Muido.

B-Muedro.

C-Tsilucco.

D-Suoido.

Arranging in dictionary, order will be Muedro, Muido, Suoido, Tsilucco.

Hence, Suoido comes in 3rd place.

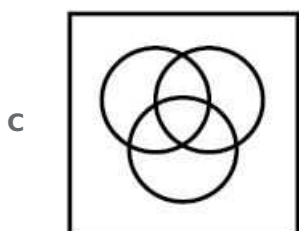
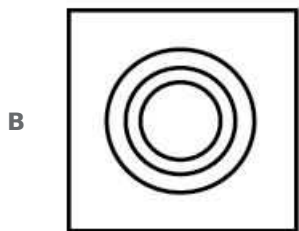
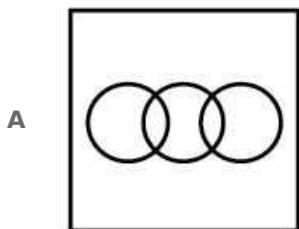
So, Option D is correct.

Instructions

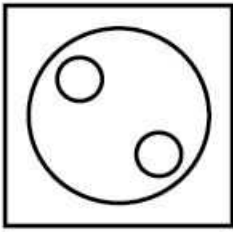
In each of the following questions, identify the diagram that best represents the relationship among classes given below :

Question 128

Christians, Catholics, Pope

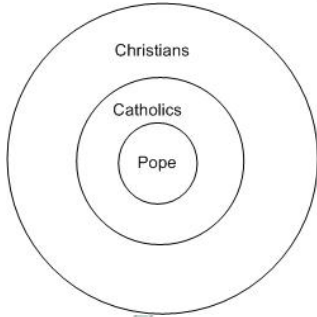


D



Answer: B

Explanation:



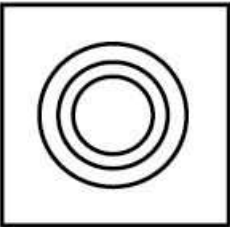
Since, all pope are Catholics and all Catholics are Christians,
Hence, above figure depicts the best relation.
Hence, Option B is the correct answer.

SSC CPO Free Mock Test

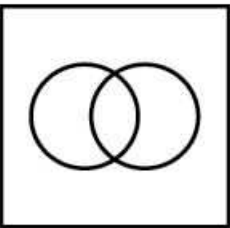
Question 129

Vegetables, Potatoes, Eatables

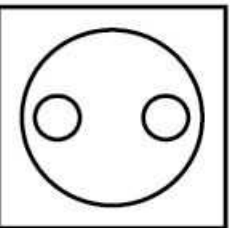
A

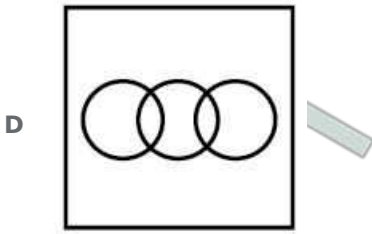


B



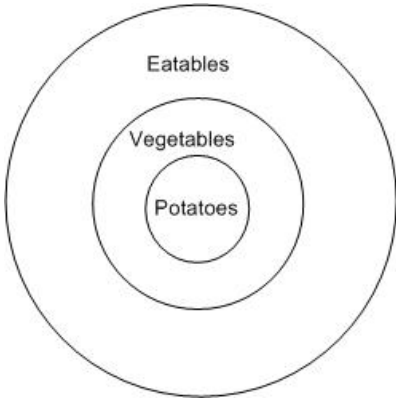
C





Answer: A

Explanation:



Since, All Potatoes are vegetables and all vegetables are eatables. Therefore, above figure depicts the relation in the best manner. Hence, Option A is correct.

Instructions

For the following questions answer them individually

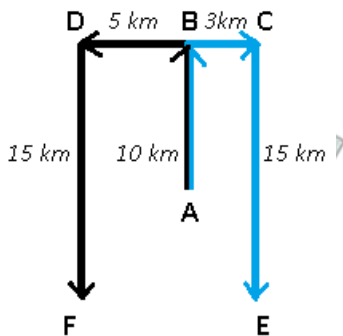
Question 130

Veena and Veeru both start from a point towards North. Veena turns to left after walking 10 km. Veeru turns to right after walking the same distance. Veena waits for some time and then walks another 5 km. Whereas Veeru walks only 3 km. They both then return towards South and walk 15 km. forward. How far is Veena from Veeru?

- A 8 km.
- B 15 km.
- C 12 km.
- D 10 km.

Answer: A

Explanation:



Let Veena and Veeru both start from point A and head north to reach B after walking 10 km, then Veena turned left and walk for 5 km and Veery turned right and walk for 3 km to reach point C, then they both started walking

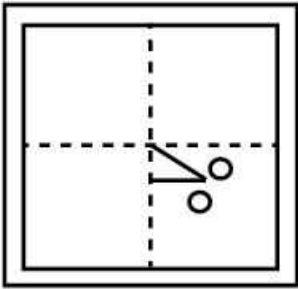
southwards for 15 km and stopped at points F and E respectively.

Thus, $EF = 5 + 3 = 8$ km

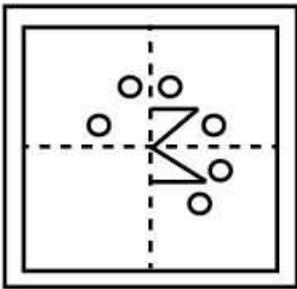
=> Ans - (A)

Question 131

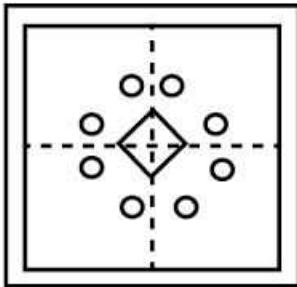
A piece of paper is folded and cut as shown below in the question figure. From the given answer figures, indicate how it will appear when opened.



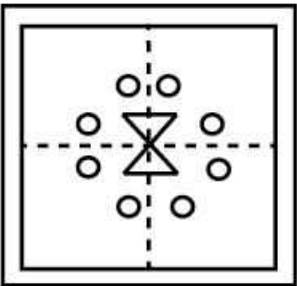
A



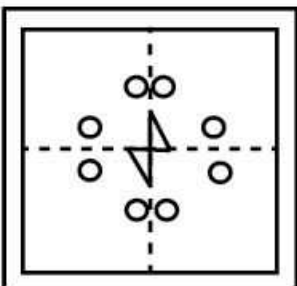
B



C



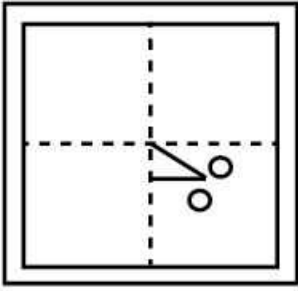
D



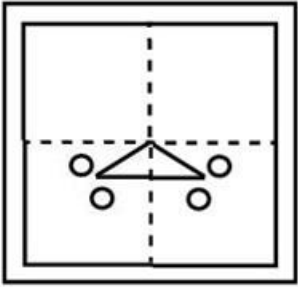
Answer: C

Explanation:

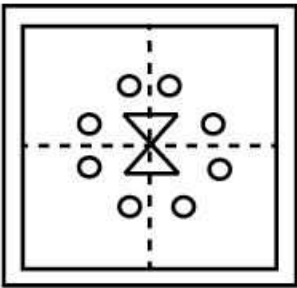
By folding and cutting the paper, we get-stage 1,



stage 2,



Stage 3,



Hence, Option C is correct.

SSC GD Free Mock Test

Question 132

Arrange the following words as per order in the dictionary.

- (1) Hale
- (2) Hake
- (3) Halt
- (4) Hamlet
- (5) Ham

- A 2, 1, 4, 3, 5
- B 2, 3, 5, 4, 1
- C 2, 1, 3, 5, 4
- D 1, 3, 5, 2, 4

Answer: C

Explanation:

Since 'Ha' is common to all words, so remove it.
We have,
(1)le.
(2)ke.
(3)lt.
(4)mlet.
(5)m
Now, we can easily find out the order as,
2,1,3,5,4.
Hence, Option C is correct.

Question 133

Name a single letter, which can be deleted from the body of the following words to form entirely new words?

HOST POST COST LOST STOP

- A** O
- B** P
- C** T
- D** S

Answer: D

Explanation:

Words : HOST POST COST LOST STOP
The common letter in each word is 'S', if we remove it.
New words formed are : Hot , Pot , Cot , Lot Top which are all valid.
=> Ans - (D)

Instructions

In each of the following questions, which one set of letters/numbers when sequentially placed at the gaps in the given letter series shall complete it?

Question 134

SH _ ELAS _ EELA _ HEELA SHEE _ A

- A** HHSS
- B** EEHS
- C** EHSL
- D** ELHA

Answer: C

Explanation:

Expression : SH _ ELAS _ EELA _ HEELA SHEE _ A
The pattern is that the word 'SHEELA' is repeated.
=> SHEELA SHEELA SHEELA SHEELA
=> Ans - (C)

Question 135

12 _ 41 _ 34123 _ _ 234

- A 3241
- B 2134
- C 1432
- D 3212

Answer: A

Explanation:

in the given pattern 12 _ 41 _ 34123 _ _ 234

the complete pattern is 1234

hence the blanks will be filled with 3241 from left to right

Question 136

aba _ ba _ ab

- A abbab
- B baabb
- C abbbb
- D bbaba

Answer: A

Instructions

For the following questions answer them individually

Question 137

Find the missing number :

2, 10, 20, 32, 46, ?

- A 62
- B 65
- C 64
- D 60

Answer: A

Explanation:

let the missing number be y

$$10 - 2 = 8$$

$$20 - 10 = 10$$

$$32 - 20 = 12$$

$$46 - 32 = 14$$

as we can see that difference is getting increased by 2 and hence

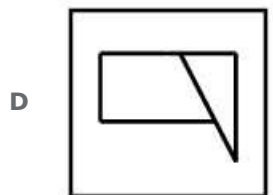
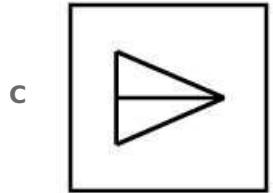
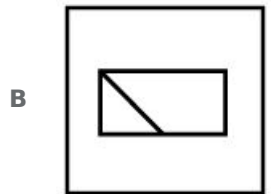
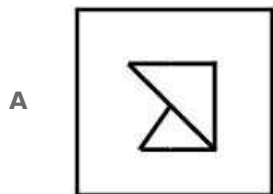
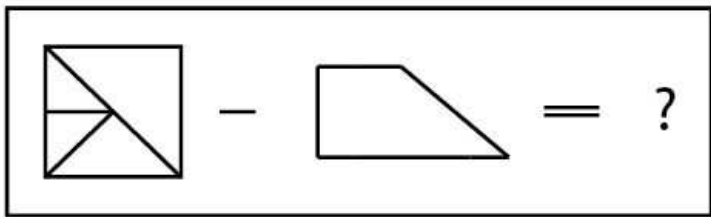
$$y - 46 = 16$$

$$y = 62$$

Free SSC Study Material (18,000 Solved Questions)

Question 138

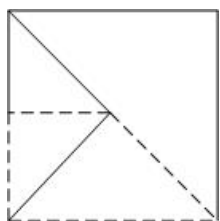
In the question one part of the problem figure is subtracted. Select the option that shows the correct shape by the subtraction.



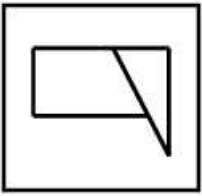
Answer: D

Explanation:

After removal we will get,



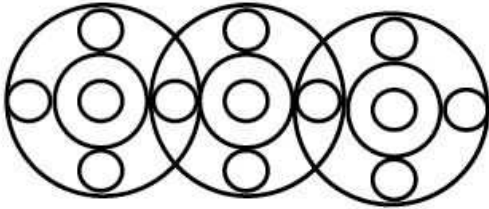
Dotted lines shows removal.
So the final image is,



Hence, Option D is correct.

Question 139

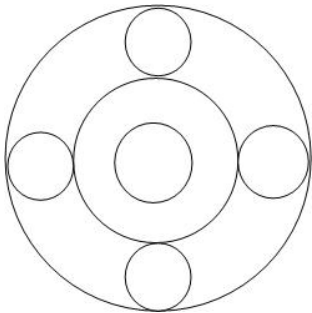
Find out the number of circles in the given figure.



- A 18
- B 19
- C 16
- D 20

Answer: B

Explanation:



In above figure, there are 7 circles.

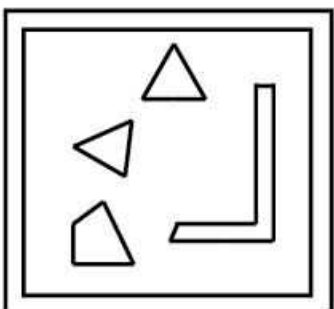
Hence in the figure given in question,

$$\text{No. of circles} = 7 \times 3 - 2 \text{ (}\because \text{ two circles are common and are counted twice).}$$
$$= 19.$$

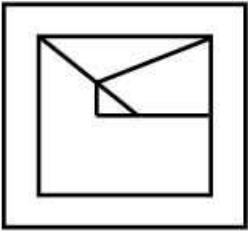
Hence, Option B is correct.

Question 140

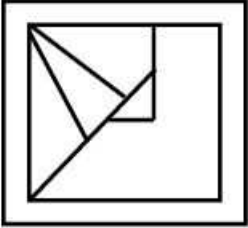
From the given answer figures, select the one in which the question figure is hidden/embedded.



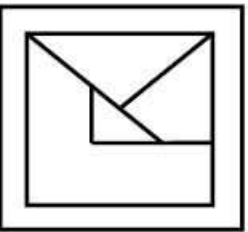
A



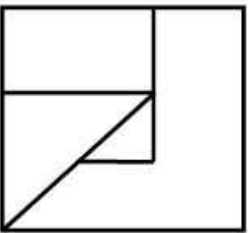
B



C



D

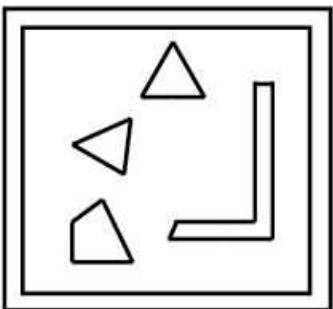


Answer: C

Explanation:



From above figure, we get parts as-



Hence, Option C is correct.

Download SSC General Knowledge PDF

Question 141

If '+' means '×', '-' means '÷', '×' means '-' and '÷' means '+', then what will be the value of $16 \div 64 - 8 \times 4 + 2$?

- A 18
- B 24
- C 16
- D 12

Answer: C

Explanation:

Expression : $16 \div 64 - 8 \times 4 + 2$

$$\equiv 16 + 64 \div 8 - 4 \times 2$$

$$= 16 + 8 - 8 = 16$$

=> Ans - (C)

Question 142

Identify the correct response from the given premises stated according to following :

'A' stands for not less than

'B' stands for not equal to

'C' stands for not greater than

'D' stands for greater than

'E' stands for less than

'F' stands for equal to

Premises : 4YF3X and 3XF6Z

- A 2 Y D 3 Z
- B 2 Y E 3 Z
- C 4 Y B 5 Z
- D 2 Y F 3 Z

Answer: D

Explanation:

Premises : 4YF3X and 3XF6Z

$$\equiv 4Y = 3X \text{ and } 3X = 6Z$$

$$\Rightarrow 4Y = 6Z \text{ or } 2Y = 3Z$$

$$\equiv 2YF3Z$$

=> Ans - (D)

Question 143

Introducing a man, a woman said "His mother is the only daughter of my father". How is the man related to the woman?

- A Brother

- B** Son
- C** Father
- D** Uncle

Answer: B

Explanation:

Only daughter of the woman's father is the woman herself.

Now, the woman is the man's mother, => The man is the son of that woman.

=> Ans - (B)

Download SSC Current Affairs Quiz PDF

Question 144

If 'air' is called 'green', 'green' is called 'blue', 'blue' is called 'sky', 'sky' is called 'yellow', 'yellow' is called 'water' and 'water' is called 'pink' then what is the colour of clear 'sky' ?

- A** Sky
- B** Water
- C** Blue
- D** Yellow

Answer: A

Explanation:

The colour of clear sky is 'blue' and as given, 'blue' is called 'sky'.

So, the colour of clear sky is 'sky'.

=> Ans - (A)

Question 145

In a certain coding system APPLE stands for ETTPI. What is the code for 'DELHI'?

- A** HIPLM
- B** CQMND
- C** CQPLM
- D** ZAHDE

Answer: A

Explanation:

APPLE stands for ETTPI

The pattern followed is :

A	P	P	L	E
(+4)	(+4)	(+4)	(+4)	(+4)
E	T	T	P	I

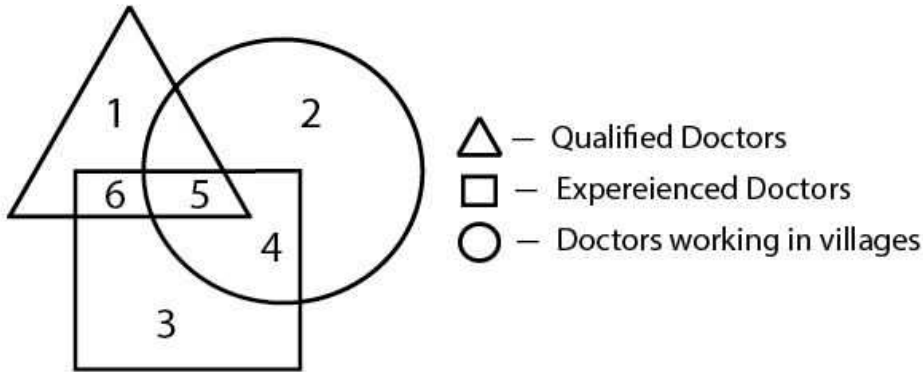
Similarly, for DELHI :

D	E	L	H	I
(+4)	(+4)	(+4)	(+4)	(+4)
H	I	P	L	M

=> Ans - (A)

Question 146

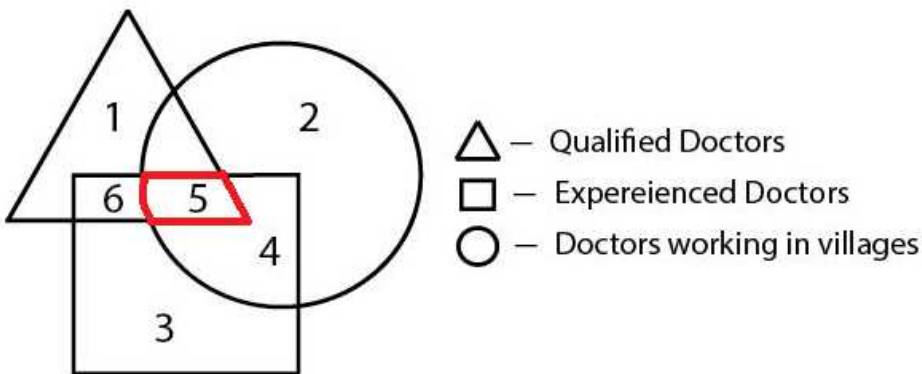
Study the diagram given below and answer question. The qualified and experienced doctors working in villages are represented by



- A 6
- B 4
- C 5
- D 2

Answer: C

Explanation:



The qualified and experienced doctors working in villages are represented by red region = 5

=> Ans - (C)

Daily Current Affairs PDF for SSC

Question 147

If CUSTOM is written as UCTSMO then how PARENT will be written in the same code?

- A ERAFTN
- B TNERAP

C RAPINE

D APERTN

Answer: D

Explanation:

Given : CUSTOM is written as UCTSMO

The pattern is that in groups of 2 letters (from either side), both letters are swapped.

Eg = CU : UC , ST : TS , OM : MO

Similarly, for PA RE NT : AP ER TN

Thus, PARENT is written as APERTN

=> Ans - (D)

Question 148

A word is represented by only one set of numbers as given in any one of the alternatives. The sets of numbers given in the alternatives are represented by two classes of alphabets as in two matrices given below. The columns and rows of Matrix I are numbered from 0 to 4 and that of Matrix II are numbered from 5 to 9. A letter from these matrices can be represented by its row and next by its column, e.g. 'A' can be represented by 01, 14 etc. and 'M' can be represented by 56, 68 etc. Similarly, you have to identify the set for the word 'EAGLE'.

MATRIX I

	0	1	2	3	4
0	P	A	G	R	Z
1	G	R	Z	P	A
2	Z	P	A	G	R
3	A	G	R	Z	P
4	R	Z	P	A	G

MATRIX II

	5	6	7	8	9
5	E	M	L	N	O
6	L	E	O	M	N
7	O	N	E	L	M
8	N	O	M	E	L
9	M	L	N	O	E

A 99, 01, 44, 96, 77

B 66, 43, 44, 79, 88

C 55, 14, 11, 78, 66

D 88, 22, 31, 89, 76

Answer: A

Explanation:

From matrix I and matrix II,

99=E.

01=A.

44=G.

96=L.

77=E.

Hence, Option A is correct.

Question 149

In a certain code, FRACTION is written as FNAITCOR. How is QUANTITATIVE written in that code?

- A QTNVIAITETU
- B QIATAETUTNVI
- C QTEATUIAVITN
- D QEAITATITNVU

Answer: D

Explanation:

Given : FRACTION is written as FNAITCOR

The pattern followed is that the letters are odd positions (from left side) are in the same position but letters in even position are written in reversed order.

Letters at odd position = FATO : FATO

Letters at even position = RCIN : NICR

Similarly, for QUANTITATIVE,

Letters at odd position = QATTTV : QATTTV

Letters at even position = UNIAIE : EIAINU

Thus, final answer after merging letters at both position : QEAITATITNVU

=> Ans - (D)

Daily Free Online GK tests

Question 150

Which of the following jumble words is not an animal?

- A LATHPEEN
- B TAR
- C FEFEOC
- D TICRECK

Answer: C

Explanation:

The animals given are :

(A) : Elephant

(B) : Rat

(C) : Not possible

(D) : Cricket

=> Ans - (C)

Latest Job Updates on Telegram - Join here

Quant

Instructions

For the following questions answer them individually

Question 151

If the sum and difference of two angles are $\frac{22}{9}$ radian and 36° respectively, then the value of smaller angle in degree taking the value of π as $\frac{22}{7}$ is :

- A 52°
- B 60°
- C 56°
- D 48°

Answer: A

Explanation:

NOTE :- 1 radian = $\frac{360^\circ}{2\pi}$

$$\Rightarrow \frac{22}{9} \text{ radian} = \frac{22}{9} * \frac{360^\circ}{2\pi}$$

$$\Rightarrow \frac{22}{9} \text{ radian} = \frac{22 * 360 * 7}{9 * 2 * 22}$$

$$\Rightarrow \frac{22}{9} \text{ radian} = 140^\circ$$

Now, let the two angles be x and y

$$\Rightarrow x + y = 140^\circ \text{ and } x - y = 36^\circ$$

Solving above equations, we get :

$$x = 88^\circ \text{ and } y = 52^\circ$$

SSC CGL Free Mock Test

Question 152

If $p = 99$ then, the value of $p(p^2 + 3p + 3)$ is :

- A 989898
- B 988899
- C 999999
- D 998889

Answer: C

Explanation:

Given : $p = 99$

To find : $p(p^2 + 3p + 3)$

$$= p^3 + 3p^2 + 3p$$

$$= (p^3 + 3p^2 + 3p + 1) - 1$$

$$= (p + 1)^3 - 1$$

$$= 100^3 - 1$$

$$= 1000000 - 1 = 999999$$

Question 153

The least number which when divided by 6, 9, 12, 15 and 18 leaves the same remainder 2 in each case is :

- A 180
- B 182
- C 178
- D 176

Answer: B

Explanation:

The numbers 6,9,12,15,18 leaves same remainder 2 in each case.

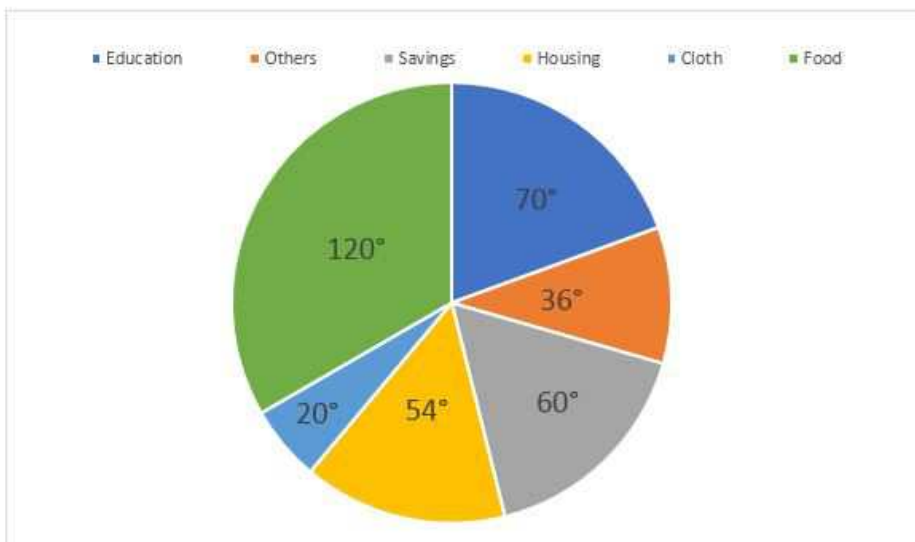
So, what we need to do is find the L.C.M. of these numbers and add 2 to it

=> L.C.M. of 6,9,12,15,18 = 180

=> Required no. = $180+2 = 182$

Instructions

The pie-chart given below shows expenditure incurred by a family on various items and their savings. Study the chart and answer the questions based on the pie-chart



Question 154

The ratio of expenditure on food to savings is :

- A 3 : 2
- B 10 : 9
- C 3 : 1
- D 2 : 1

Answer: D

Explanation:

Degree of expenditure on food = 120

Degree of expenditure on savings = 60

=> Required ratio = $120/6 = 2 : 1$

SSC CGL Previous Papers (DOWNLOAD PDF)

Question 155

If the expenditure on education is 1600 more than that on housing, then the expenditure on food is :

- A 12000
- B 6000
- C 3333
- D 7000

Answer: A

Explanation:

Let total income = $360x$

Expenditure on education = $\frac{70}{360} * 360x = 70x$

Expenditure on housing = $\frac{54}{360} * 360x = 54x$

=> Required difference = $70x - 54x = 1600$

=> $x = 100$

Expenditure on food = $\frac{120}{360} * 360x = 120x$

=> $120 * 100 = 12000$

Question 156

If the monthly income is 36000, then the yearly savings is :

- A 70000
- B 72000
- C 60000
- D 74000

Answer: B

Explanation:

Monthly income = 36,000

Monthly savings = $\frac{60}{360} * 36000 = 6,000$

=> Yearly savings = $12 * 6000 = 72,000$

Instructions

For the following questions answer them individually

Question 157

Among the equations $x + 2y + 9 = 0$; $5x - 4 = 0$; $2y - 13 = 0$; $2x - 3y = 0$, the equation of the straight line passing through origin is

- A $2x - 3y = 0$
- B $x + 2y + 9 = 0$

C $5x - 4 = 0$

D $2y - 13 = 0$

Answer: A

Explanation:

For a straight line to pass through origin, both of its x & y coordinates should be '0'.

(A) : $2x - 3y = 0$

\Rightarrow If $x = y = 0$, then L.H.S. = 0 = R.H.S

\Rightarrow It passes through origin

(B) : $x + 2y + 9 = 0$

\Rightarrow If $x = y = 0$, then L.H.S. = 9 \neq R.H.S. = 0

\Rightarrow It does not pass through origin

(C) : $5x - 4 = 0$

\Rightarrow If $x = 0$, then L.H.S. = -4 \neq R.H.S. = 0

\Rightarrow It does not pass through origin

(D) : $2y - 13 = 0$

\Rightarrow If $y = 0$, then L.H.S. = -13 \neq R.H.S. = 0

\Rightarrow It does not pass through origin

Ans - (A)

SSC CGL Tier-2 Previous Papers PDF

Question 158

If the three angles of a triangle are : $(x + 15^\circ)$, $\left[\frac{6x}{5} + 6^\circ\right]$ and $\left[\frac{2x}{3} + 30^\circ\right]$ then the triangle is

A isosceles

B right angled

C equilateral

D scalene

Answer: C

Explanation:

Sum of all angles of a triangle = 180°

$\Rightarrow (x + 15^\circ) + \left(\frac{6x}{5} + 6^\circ\right) + \left(\frac{2x}{3} + 30^\circ\right) = 180^\circ$

$\Rightarrow 15x + 18x + 10x = 129 \times 15$

$\Rightarrow x = 3 \times 15 = 45^\circ$

Now, 1st angle = $(x + 15^\circ) = 60^\circ$

2nd angle = $\left(\frac{6x}{5} + 6^\circ\right) = 6 \times 9 + 6 = 60^\circ$

3rd angle = $\left(\frac{2x}{3} + 30^\circ\right) = 30 + 30 = 60^\circ$

Since, all angles are equal, thus given triangle is an equilateral triangle.

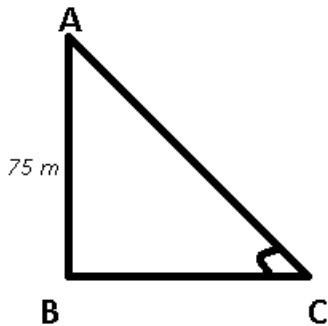
Question 159

A kite is flying at the height of 75m from the ground. The string makes an angle θ (where $\cot\theta = 8/15$) with the level ground. Assuming that there is no slack in the string the length of the string is equal to :

- A 85 metre
- B 65 metre
- C 75 metre
- D 40 metre

Answer: A

Explanation:



Height of kite from ground = $AB = 75\text{ m}$

$\angle ACB = \theta$

We know that $\cot\theta = \frac{8}{15}$

$$\Rightarrow \frac{BC}{AB} = \frac{8}{15}$$

$$\Rightarrow BC = \frac{8 \times 75}{15} = 40\text{ m}$$

Now, length of string $AC = \sqrt{(AB)^2 + (BC)^2}$

$$\begin{aligned} \Rightarrow AC &= \sqrt{75^2 + 40^2} \\ &= \sqrt{5625 + 1600} = \sqrt{7225} \end{aligned}$$

$$\Rightarrow AC = 85\text{ m}$$

Question 160

In an examination, a student must get 36% marks to pass. A student who gets 190 marks failed by 35 marks. The total marks in that examination is

- A 450
- B 810
- C 500
- D 625

Answer: D

Explanation:

Let total marks in the examination = $100x$

Pass % = 36%

$$\Rightarrow \text{Passing marks} = \frac{36}{100} \times 100x = 36x$$

Now, according to question

$$\Rightarrow 190 + 35 = 36x$$

$$\Rightarrow x = 225/36 = 6.25$$

$$\Rightarrow \text{Total marks} = 6.25 \times 100 = 625$$

SSC CGL Important Questions PDF

Question 161

If D, E and F are the mid points of BC, CA and AB respectively of the $\triangle ABC$ then the ratio of area of the parallelogram DEFB and area of the trapezium CAFD is :

A 2 : 3

B 3 : 4

C 1 : 2

D 1 : 3

Answer: A

Explanation:

Let, each side of the triangle be $2x$.

So, $AF=FB=BD=DC=CE=EA=x$. $EF=FD=DE=x$ (as always $EF = \text{half of } BC$)

area of the parallelogram DEFB is $\text{base} \times \text{height} = (x) \times h_p$

& area of the trapezium CAFD is $\frac{1}{2} \times \text{base} \times \text{height} = \frac{1}{2} \times (x + 2x) \times h_t$

Clearly, both the heights are to be measured from midpoint of sides to midpoints of the line joining the midpoints of the side. So, $h_p = h_t$.

ratio of area of the parallelogram DEFB and area of the trapezium CAFD is

$$= \frac{(x) \times h_p}{\frac{1}{2} \times (x+2x) \times h_t}$$

$$= 2 : 3$$

Question 162

4 men and 6 women complete a work in 8 days. 2 men and 9 women also complete in 8 days. The number of days in which 18 women complete the work is :

A $4\frac{1}{3}$ days

B $5\frac{1}{3}$ days

C $4\frac{2}{3}$ days

D $5\frac{2}{3}$ days

Answer: B

Explanation:

4 men and 6 women takes same time as 2 men and 9 women

Let $m \rightarrow$ man and $w \rightarrow$ woman

$$\Rightarrow (4m + 6w) = (2m + 9w)$$

$$\Rightarrow 2m = 3w$$

Let no. of days in which 18 women complete work = x

$$\Rightarrow 18w * x = (4m + 6w) * 8$$

$$\Rightarrow 18w * x = (6w + 6w) * 8$$

$$\Rightarrow x = \frac{12*8}{18}$$

$$\Rightarrow x = \frac{16}{3} = 5\frac{1}{3} \text{ days}$$

Question 163

If $x = 2$ then the value of $x^3 + 27x^2 + 243x + 631$ is

- A 1233
- B 1211
- C 1231
- D 1321

Answer: A

Explanation:

$x^3 + 27x^2 + 243x + 631$ the following equation is equal to $(x + 9)^3 - 98$

So using value of $x = 2$ which is given in question

$$x^3 + 27x^2 + 243x + 631 = (x + 9)^3 - 98 = (11^3) - 98$$

$$= 1331 - 98$$

$$= 1233$$

1500 + Free Must Solved SSC Questions (With Solutions)

Question 164

If the volume of a sphere is numerically equal to its surface area then its diameter is

- A 6cm
- B 4 cm
- C 2 cm
- D 3 cm

Answer: A

Explanation:

Let the radius of sphere = r

Since, volume of sphere = surface area

$$\Rightarrow \frac{4}{3}\pi r^3 = 4\pi r^2$$

$$\Rightarrow r = 3$$

$$\Rightarrow \text{Diameter} = 2 * r = 2*3 = 6 \text{ cm}$$

Question 165

The average marks obtained by a student in 6 subjects is 88. On subsequent verification it was found that the marks obtained by him in a subject was wrongly copied as 86 instead of 68. The correct average of the marks obtained by him is

- A 87
- B 85
- C 84
- D 86

Answer: B

Explanation:

$$\text{Average} = \frac{\text{Sum of Elements}}{\text{Number of Elements}}$$

Number of subjects = 6

wrong average = 88

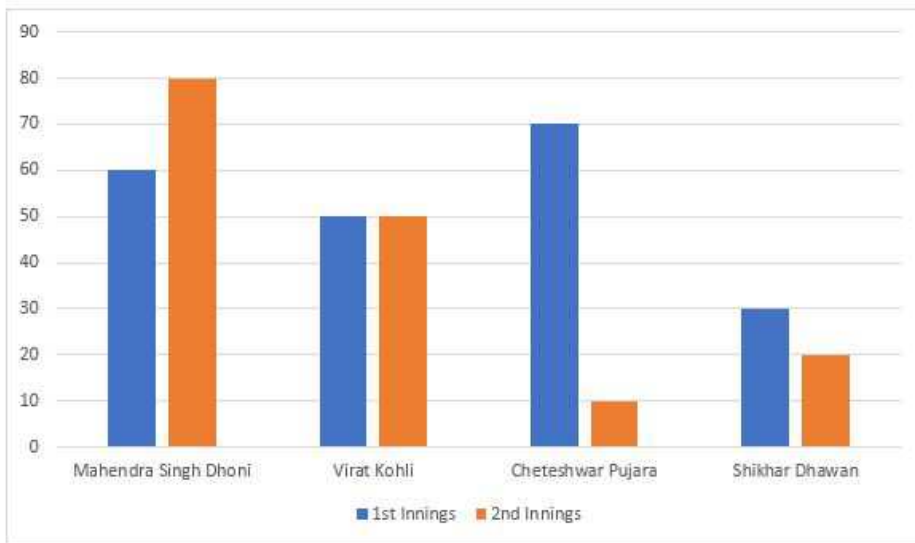
sum of marks calculated wrongly in all subjects = $88 \times 6 = 528$

Correct Marks = $528 - 86 + 68 = 510$

Correct Average of marks = $\frac{510}{6} = 85$

Instructions

Given here is a multiple bar diagram of the scores of four players in two innings. Study the diagram and answer the questions:



Question 166

The average runs of two innings of the player who scored highest in average are :

- A 70
- B 80
- C 85
- D 75

Answer: A

Explanation:

Runs scored in 1st and 2nd innings respectively :

Dhoni = $60+80 = 140$ [MAX]

Virat = $50+50 = 100$

Pujara = $70+10 = 80$

Dhawan = $30+20 = 50$

Since, Dhoni scored the maximum in both innings

=> Average = $140/2 = 70$

General Science Notes for SSC CGL

Question 167

The average runs in two innings of the player who has scored minimum in the second innings are :

A 30

B 60

C 50

D 40

Answer: D

Explanation:

In 2nd inning Cheteswar Pujara has scored minimum ,

runs in 1st innings = 70

runs in 2nd innings = 10

$$\text{Average} = \frac{\text{Sum of Elements}}{\text{Number of Elements}}$$

$$\text{average runs} = \frac{70+10}{2} = 40$$

Question 168

The total scores in the first innings contributed by the four players is :

A 190

B 210

C 220

D 200

Answer: B

Explanation:

Runs scored in 1st innings by the players = $60+50+70+30$

= 210 runs

Question 169

The average score in second innings contributed by the four players is :

A 40

B 50

C 30

D 60

Answer: A

Explanation:

Runs scored by the players in 2nd innings = $80+50+10+20$

= 160

=> Average score in 2nd innings by 4 players = $\frac{160}{4} = 40$

Free SSC Study Material (18,000 Solved Questions)

Instructions

For the following questions answer them individually

Question 170

If $\frac{3}{4}$ of a number is 7 more than $\frac{1}{6}$ of the number, then $\frac{5}{3}$ of the number is

A 12

B 20

C 15

D 18

Answer: B

Explanation:

Let the number be x

Acc to ques :

$$\Rightarrow \frac{3x}{4} = \frac{x}{6} + 7$$

$$\Rightarrow \frac{14x}{24} = 7$$

$$\Rightarrow x = 12$$

$$\Rightarrow \frac{5}{3} \text{ of the number} = \frac{5}{3} * 12 = 20$$

Question 171

A's 2 days' work is equal to B's 3 days' work. If A can complete the work in 8 days then to complete the work B will take

A 14 days

B 12 days

C 15 days

D 16 days

Answer: B

Explanation:

A's 2 days work = B's 3 days work

$$\Rightarrow 2A = 3B \Rightarrow A = \frac{3B}{2}$$

Now, A can complete the work in 8 days

$$\Rightarrow 8A = 8 * \frac{3B}{2}$$

$$\Rightarrow 8A = 12B$$

Hence, B can complete the same work in 12 days.

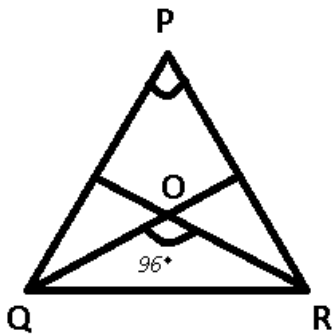
Question 172

Internal bisectors of $\angle Q$ and $\angle R$ of $\triangle PQR$ intersect at O. If $\angle ROQ = 96^\circ$ then the value of $\angle RPQ$ is

- A 36°
- B 24°
- C 12°
- D 6°

Answer: C

Explanation:



To find : $\angle RPQ = \theta = ?$

Solution : Let $\angle PQR = 2x$ and $\angle PRQ = 2y$

$\Rightarrow \angle OQR = x$ and $\angle ORQ = y$ [Since, QO & RO are angle bisectors]

In $\triangle PQR$

$$\Rightarrow \theta + \angle PQR + \angle PRQ = 180^\circ$$

$$\Rightarrow \theta = 180^\circ - 2(x + y) \text{ -----Eqn(1)}$$

In $\triangle QOR$

$$\Rightarrow x + y + 96^\circ = 180^\circ$$

$$\Rightarrow x + y = 84^\circ$$

Putting value of $(x+y)$ in eqn (1)

$$\Rightarrow \theta = 180 - 2 \cdot 84 = 180 - 168 = 12^\circ$$

SSC Exam Free Videos (Youtube)

Question 173

If $x = \sqrt{2+1}$ then $(x + 1)$ equals to

- A 2
- B $\sqrt{2}$
- C $\sqrt{2} + 1$
- D $\sqrt{2} - 1$

Answer: B

Explanation:

Expression : $x = \frac{1}{\sqrt{2}+1}$

$\Rightarrow x = \frac{1}{\sqrt{2}+1} \times \frac{\sqrt{2}-1}{\sqrt{2}-1}$

$\Rightarrow x = \sqrt{2} - 1$

$\Rightarrow x + 1 = \sqrt{2}$

Question 174

If the number of vertices, edges and faces of a rectangular parallelepiped are denoted by v , e and f respectively, the value of $(v - e + f)$ is

- A 0
- B 2
- C 4
- D 1

Answer: B

Explanation:

Euler's polyhedral formula states that the number of vertices V , faces F and edges E in a polyhedron satisfy :

$$V + F - E = 2$$

\Rightarrow Ans - (B)

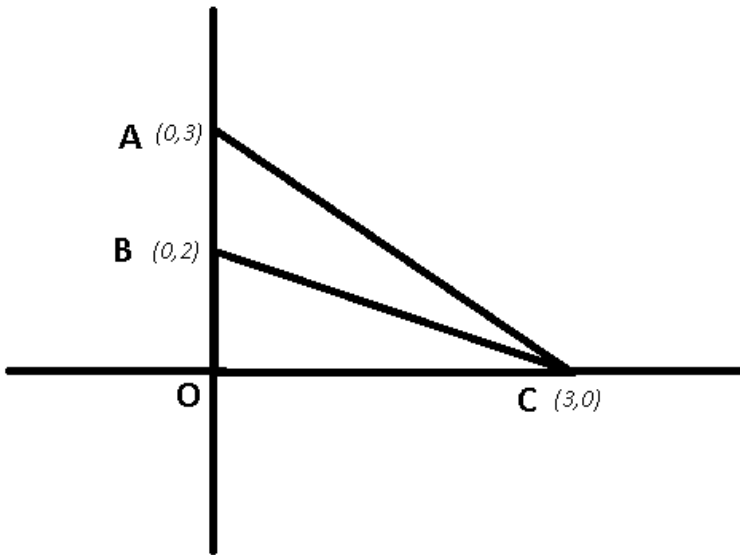
Question 175

The area of the triangle formed by the graphs of the equations $x=0$, $2x+3y=6$ and $x+y=3$ is :

- A 3 sq. unit
- B $4\frac{1}{2}$ sq. unit
- C $1\frac{1}{2}$ sq. unit
- D 1 sq. unit

Answer: C

Explanation:



AC represents $x + y = 3$

BC represents $2x + 3y = 6$

AB represents $x = 0$

\Rightarrow ABC is the required triangle.

Base AB = 1 unit and height OC = 3 units

\Rightarrow Area of $\triangle ABC = \frac{1}{2} * AB * OC$

$= \frac{1}{2} * 1 * 3 = 1 \frac{1}{2}$ sq. unit

SSC Free Preparation App

Question 176

If $5x + 9y = 5$ and $125x^3 + 729y^3 = 120$ then the value of the product of x and y is

- A $\frac{1}{9}$
- B $\frac{1}{135}$
- C 45
- D 135

Answer: B

Explanation:

Expression : $5x + 9y = 5$

Cubing both sides, we get :

$$\Rightarrow (5x + 9y)^3 = 125$$

$$\Rightarrow 125x^3 + 729y^3 + 135xy(5x + 9y) = 125$$

$$\Rightarrow 125x^3 + 729y^3 + 135xy * 5 = 125$$

Since, $125x^3 + 729y^3 = 120$

$$\Rightarrow xy = \frac{5}{5 * 135} = \frac{1}{135}$$

Question 177

What must be added to each term of the ratio 2 : 5 so that it may equal to 5 : 6 ?

- A 65
- B 78
- C 13
- D 12

Answer: C

Explanation:

let the number added to both numerator and denominator be y

It is given that :

$$\frac{2+y}{5+y} = \frac{5}{6}$$

$$\Rightarrow 12 + 6y = 25 + 5y$$

$$\Rightarrow y = 13$$

Question 178

The value of $\sin^2 22^\circ + \sin^2 68^\circ + \cot^2 30^\circ$ is

- A 4
- B 3
- C $\frac{3}{4}$
- D $\frac{5}{4}$

Answer: A

Explanation:

Expression : $\sin^2 22^\circ + \sin^2 68^\circ + \cot^2 30^\circ$

We know that $\sin(90^\circ - \theta) = \cos\theta$

$$\Rightarrow \sin 22^\circ = \sin(90^\circ - 68^\circ) = \cos 68^\circ$$

$$\Rightarrow \cos^2 68^\circ + \sin^2 68^\circ + (\sqrt{3})^2$$

$$\Rightarrow 1 + 3 = 4$$

Daily Free SSC Practice Set

Question 179

The minimum value of $2\sin^2 \theta + 3\cos^2 \theta$ is

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

Answer: C

Explanation:

Expression : $2\sin^2 \theta + 3\cos^2 \theta$

We know that, $\sin^2 \theta = 1 - \cos^2 \theta$

$$\Rightarrow 2(1 - \cos^2 \theta) + 3\cos^2 \theta$$

$$= \cos^2 \theta + 2$$

Using the formula, $\cos^2 \theta = \frac{\cos 2\theta + 1}{2}$

$$\Rightarrow \frac{\cos 2\theta + 1}{2} + 2$$

$$= \frac{\cos 2\theta}{2} + \frac{5}{2}$$

\therefore minimum value of $\cos 2\theta = -1$

$$\Rightarrow \text{min value} = \frac{5}{2} - \frac{1}{2} = 2$$

Question 180

If $\frac{x^{24}+1}{x^{12}} = 7$ then the value of $\frac{x^{72}+1}{x^{36}}$ is

A 433

B 322

C 343

D 432

Answer: B

Explanation:

$$\frac{x^{24}+1}{x^{12}} = 7$$

We need to find, $\frac{x^{72}+1}{x^{36}} = x^{36} + \frac{1}{x^{36}}$

$$\Rightarrow x^{12} + \frac{1}{x^{12}} = 7$$

Cubing both sides, and using the formula $(a + b)^3 = a^3 + b^3 + 3ab(a+b)$, we get :

$$\Rightarrow x^{36} + \frac{1}{x^{36}} + 3 * 1 * (x^{12} + \frac{1}{x^{12}}) = 343$$

$$\Rightarrow x^{36} + \frac{1}{x^{36}} + 21 = 343$$

$$\Rightarrow x^{36} + \frac{1}{x^{36}} = 343 - 21 = 322$$

Question 181

5 persons will live in a tent. If each person requires 16m² of floor area and 100m³ space for air then the height of the cone of smallest size to accommodate these persons would be

A 16 metre

B 10.25 metre

C 20 metre

D 18.75 metre

Answer: D

Explanation:

Floor area required for 5 persons = $16 * 5 = 80 \text{ m}^2$

Air space required for 5 persons = $100 \times 5 = 500 \text{ m}^3$

Cone volume = $\frac{1}{3} \pi r^2 h$

Let height be h

For smallest size, volume = $500 = \frac{1}{3} \times 80 \times h$

$\Rightarrow h = \frac{150}{8} = 18.75 \text{ m}$

SSC CGL Free Online Coaching

Question 182

If A and B are in the ratio 4 : 5 and the difference of their squares is 81, what is the value of A?

- A 45
- B 12
- C 36
- D 15

Answer: B

Explanation:

Let $A = 4x$ and $B = 5x$

Difference in their squares = $(5x)^2 - (4x)^2 = 81$

$\Rightarrow 25x^2 - 16x^2 = 81$

$\Rightarrow x^2 = \frac{81}{9}$

$\Rightarrow x = 3$

value of A = $4 \times 3 = 12$

Question 183

If the measure of three angles of a triangle are in the ratio 2 : 3 : 5, then the triangle is :

- A right angled
- B isosceles
- C obtuse angled
- D equilateral

Answer: A

Explanation:

Let the angles of the triangle be $2x$, $3x$ and $5x$

According to angle sum property :

$\Rightarrow 2x + 3x + 5x = 180^\circ$

$\Rightarrow x = \frac{180}{10} = 18^\circ$

\therefore the angles are 36° , 54° and 90°

\Rightarrow It is right angled triangle.

Question 184

If 4 men or 8 women can do a piece of work in 15 days, in how many days can 6 men and 12 women do the same piece of work ?

- A 20 days
- B 45 days
- C 15 days
- D 30 days

Answer: B

Explanation:

4 men can do the work in 15 days

$$\Rightarrow \text{Rate at which 1 man do the work} = \frac{15}{4}$$

8 women can also do the work in 15 days

$$\Rightarrow \text{Rate at which 1 woman do the work} = \frac{15}{8}$$

Time taken by 6 men and 12 women to do the same work

$$\begin{aligned} &= 6 * \frac{15}{4} + 12 * \frac{15}{8} \\ &= \frac{90}{4} + \frac{45}{2} = 45 \text{ days} \end{aligned}$$

SSC CHSL Previous Question papers (download pdf)

Question 185

A certain sum will amount to 12,100 in 2 years at 10% per annum of compound interest, interest being compounded annually. The sum is

- A 8000
- B 6000
- C 12000
- D 10000

Answer: D

Explanation:

Let the sum = x

rate = 10% and time = 2 years

$$\text{Amount after compound interest} = x(1 + \frac{10}{100})^2 = 12100$$

$$\Rightarrow \frac{121x}{100} = 12100$$

$$\Rightarrow x = 10,000$$

Question 186

The cost price of 100 books is equal to the selling price of 60 books. The gain or loss percentage will be :

- A 66 %
- B $66\frac{2}{3}$ %

C $66\frac{1}{4}\%$

D $66\frac{3}{4}\%$

Answer: B

Explanation:

Let the cost price of 1 book be Rs C

and the selling Price of 1 book be Rs S

It is given that cost price of 100 books is equal to the selling price of 60 books

So, $100 \times C = 60 \times S$

$S = \frac{5}{3} C$

So Profit % = $\frac{\text{Selling Price} - \text{Cost Price}}{\text{Cost Price}} \times 100$

= $\frac{\frac{5}{3}C - C}{C} \times 100$

= $\frac{2}{3} * 100 = 66\frac{2}{3}\%$

Question 187

Find a simple discount equivalent to a discount series of 10%, 20% and 25%.

A 55%

B 45%

C 52%

D 46%

Answer: D

Explanation:

Let assume the initial amount be Rs 100

Now after 10% discount, Rs 100 reduces to = $100 - (\frac{10}{100} \times 100) = \text{Rs } 90$

Now for 2nd discount of 20% the initial amount is Rs 90. So amount after 2nd discount = $90 - (\frac{20}{100} \times 90) = \text{Rs } 72$

Now for 3rd discount of 25% the initial amount is Rs 72. So amount after 3rd discount = $72 - \frac{25}{100} \times 72 = \text{Rs } 54$

total percentage change = $\frac{100 - 54}{100} \times 100 = 46\%$

hence the value of discount equivalent to the given three discounts of 10%, 20%, 25% is 46%

SSC CPO Previous Question papers (download pdf)

Question 188

G is the centroid of ΔABC . The medians AD and BE intersect at right angles. If the lengths of AD and BE are 9 cm and 12 cm respectively: then the length of AB (in cm) is

A 9.5

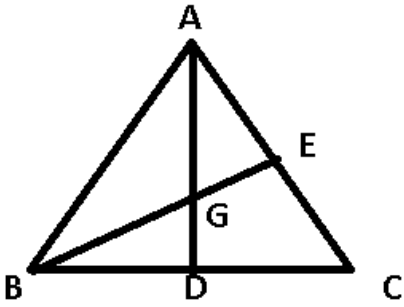
B 10

C 11

D 10.5

Answer: B

Explanation:



Given : $AD = 9$ & $BE = 12$ are medians. G is centroid of $\triangle ABC$

$$\angle AGB = 90$$

To find : $AB = ?$

Solution : A centroid divides a median in the ratio = $2 : 1$

$$\Rightarrow AG : GD = 2 : 1$$

$$\Rightarrow AG = 6 \text{ cm}$$

Similarly, $BG = 8 \text{ cm}$

Now, in right angled $\triangle ABC$

$$\Rightarrow AB = \sqrt{(AG)^2 + (BG)^2}$$

$$\Rightarrow AB = \sqrt{6^2 + 8^2} = \sqrt{100}$$

$$\Rightarrow AB = 10 \text{ cm}$$

Question 189

If θ be acute angle and $\tan(4\theta - 50^\circ) = \cot(50^\circ - \theta)$, then the value of θ in degrees is:

A 20

B 50

C 40

D 30

Answer: D

Explanation:

$$\tan(90-\theta) = \cot\theta$$

$$\tan(4\theta-50) = \cot(90 - (4\theta-50))$$

$$= \cot(140-4\theta)$$

$$\text{Given } \tan(4\theta - 50^\circ) = \cot(50^\circ - \theta)$$

$$\tan(4\theta - 50^\circ) = \cot(140^\circ - 4\theta)$$

$$\cot(50^\circ - \theta) = \cot(140^\circ - 4\theta)$$

$$50^\circ - \theta = 140^\circ - 4\theta$$

$$3\theta = 90^\circ$$

$$\theta = 30^\circ$$

Option D is the correct answer.

Question 190

Let C_1 and C_2 be the inscribed and circumscribed circles of a triangle with sides 3 cm, 4 cm area of C, and 5 cm then $\frac{\text{area of } C_1}{\text{area of } C_2}$

- A $\frac{9}{25}$
- B $\frac{4}{25}$
- C $\frac{9}{16}$
- D $\frac{16}{25}$

Answer: B

Explanation:

Sides of the triangle = 3, 4 and 5 cm

$$\therefore 3^2 + 4^2 = 25 = 5^2$$

Clearly, it is a right angled triangle.

$$\Rightarrow \text{Area of } \triangle = \frac{1}{2} * 3 * 4 = 6 \text{ cm}^2$$

Let radius of $C_1 = r_1$ and of $C_2 = r_2$

Using the formula, Area = inradius * semi perimeter

$$\Rightarrow r_1 = \frac{6}{\frac{3+4+5}{2}}$$

$$\Rightarrow r_1 = 1 \text{ cm}$$

Also, area = $\frac{a*b*c}{4*R}$ [where a,b,c are sides of triangle and R is circumradius]

$$\Rightarrow r_2 = \frac{3*4*5}{4*6}$$

$$\Rightarrow r_2 = 2 \text{ cm}$$

To find : $\frac{\text{area of } C_1}{\text{area of } C_2}$

$$= \frac{\pi r_1^2}{\pi r_2^2}$$

$$= \frac{1}{4} = \frac{4}{25}$$

SSC GD Previous Question papers (download pdf)

Question 191

A train 180 metres long is running at a speed of 90 km/h. How long will it take to pass a post ?

- A 8.2 secs
- B 7.8 secs
- C 8 secs
- D 7.2 secs

Answer: D

Explanation:

$$\text{speed of train} = 90 \text{ km/h} = 90 * \frac{5}{18} \text{ m/s}$$

$$\Rightarrow \text{speed} = 25 \text{ m/s}$$

$$\text{Time taken to pass the post} = \frac{180}{25} = 7.2 \text{ sec}$$

Question 192

The difference between successive discounts of 40% followed by 30% and 45% followed by 20% on the marked price of an article is Rs. 12. The marked price of the article is :

- A 800
- B 400
- C 200
- D 600

Answer: D

Explanation:

let the marked price of the article be Rs y

1st case :

Two successive discounts 40% followed by 30%

So after these two successive discounts the value of article becomes = $0.6 \times 0.7 \times y = 0.42y$

2nd case

Two successive discounts are 45% followed by 20%

So after these two discounts the price if article becomes = $0.55 \times 0.8 \times y = 0.44y$

It is given that :

$$0.44y - 0.42y = 12$$

$$0.02y = 12$$

$$y = \text{Rs } 600$$

Question 193

If $5 \sin\theta = 3$, the numerical value of $\frac{\sec\theta - \tan\theta}{\sec\theta + \tan\theta}$ is

- A $\frac{1}{2}$
- B $\frac{1}{5}$
- C $\frac{1}{3}$
- D $\frac{1}{4}$

Answer: D

Explanation:

Expression : $5\sin\theta = 3$

$$\Rightarrow \sin\theta = \frac{3}{5}$$

We know that, $\cos\theta = \sqrt{1 - \sin^2\theta}$

$$\Rightarrow \cos\theta = \sqrt{1 - \frac{9}{25}} = \sqrt{\frac{16}{25}}$$

$$\Rightarrow \cos\theta = \frac{4}{5}$$

Now, $\tan\theta = \frac{3}{4}$ and $\sec\theta = \frac{5}{4}$

To find : $\frac{\sec\theta - \tan\theta}{\sec\theta + \tan\theta}$

$$\begin{aligned} &= \frac{\frac{4}{5} - \frac{4}{3}}{4 + 4} \\ &= \frac{2}{8} = \frac{1}{4} \end{aligned}$$

SSC MTS Previous Question papers (download pdf)

Question 194

A train runs at an average speed of 75 km/hr. If the distance to be covered is 1050 kms, how long will the train take to cover it ?

- A 13 hrs
- B 12 hrs
- C 15 hrs
- D 14 hrs

Answer: D

Explanation:

Speed of train = 75 km/h

Distance to be covered = 1050 km

=> Time taken = $\frac{\text{distance}}{\text{speed}}$

$$= \frac{1050}{75} = 14 \text{ hours}$$

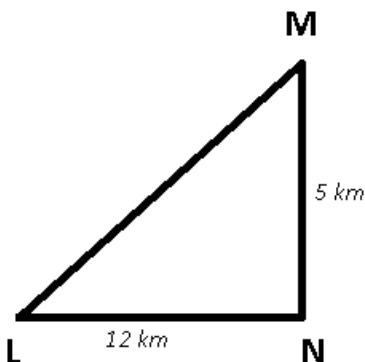
Question 195

If a person travels from a point L towards east for 12 km and then travels 5 km towards north and reaches a point M, then shortest distance from L to M is :

- A 17 km
- B 13 km
- C 14 km
- D 12 km

Answer: B

Explanation:



After travelling 12 km towards east, the person reaches N and then 5 km towards north, he reaches M

Clearly $\triangle LMN$ is right angled triangle.

$$\Rightarrow LM = \sqrt{(LN)^2 + (MN)^2}$$

$$\Rightarrow LM = \sqrt{12^2 + 5^2}$$

$$\Rightarrow LM = \sqrt{169} = 13 \text{ km}$$

Question 196

An article which is marked at Rs. 975 is sold for Rs.897. The discount percent is

- A 10%
- B 12%
- C 6%
- D 8%

Answer: D

Explanation:

Marked price(M) of article = Rs 975

Selling Price (S) of article = Rs 897

$$\text{Discount \%} = \frac{M-S}{M} \times 100 = \frac{975-897}{975} \times 100$$
$$= 8\%$$

SSC Stenographer Previous Question papers (download pdf)

Question 197

If the altitude of an equilateral triangle is $12\sqrt{3}$ cm, then its area would be :

- A 12cm^2
- B $144\sqrt{3}\text{cm}^2$
- C 72cm^2
- D $36\sqrt{3}\text{cm}^2$

Answer: B

Explanation:

Let each side of the equilateral triangle be a

The altitude of an equilateral triangle bisects the opposite side.

$$\Rightarrow \left(\frac{a}{2}\right)^2 + (12\sqrt{3})^2 = a^2$$

$$\Rightarrow a^2 - \frac{a^2}{4} = 432$$

$$\Rightarrow a^2 = \frac{1728}{3}$$

$$\text{Area of equilateral triangle} = \frac{\sqrt{3}}{4} * a^2$$

$$= \frac{\sqrt{3}}{4} * \frac{1728}{3}$$

$$= 144\sqrt{3}$$

Question 198

What is the arithmetic mean of first 20 odd natural numbers ?

- A 19

- B 17
- C 22
- D 20

Answer: D

Explanation:

NOTE :- Sum of first 'n' odd natural numbers = n^2

Sum of first 'n' even natural numbers = $n(n+1)$

Sum of first 20 odd natural numbers = $20^2 = 400$

Arithmetic mean = $400/20 = 20$

Question 199

The HCF of $x^8 - 1$ and $x^4 + 2x^3 - 2x - 1$ is

- A $x^2 + 1$
- B $x^2 - 1$
- C $x + 1$
- D $x - 1$

Answer: B

Explanation:

$x^8 - 1$ can be written as $(x^4 - 1)(x^4 + 1)$, which, in turn, can be written as $(x^2 - 1)(x^2 + 1)(x^4 + 1)$

$x^4 + 2x^3 - 2x - 1$ can be written as $(x^2 - 1)(x^2 + 2x + 1)$.

Hence, we can see that $x^2 - 1$ is the HCF.

SSC CHSL Free Mock Test

Question 200

If $\sec\theta + \tan\theta = p$, ($p \neq 0$) then $\sec\theta$ is equal to

- A $[p - \frac{1}{p}], p \neq 0$
- B $2[p - \frac{1}{p}], p \neq 0$
- C $[p + \frac{1}{p}], p \neq 0$
- D $\frac{1}{2}[p + \frac{1}{p}], p \neq 0$

Answer: D

Explanation:

$\Rightarrow \sec\theta + \tan\theta = p$ -----Eqn(1)

$\therefore \sec^2\theta - \tan^2\theta = 1$

$\Rightarrow (\sec\theta + \tan\theta)(\sec\theta - \tan\theta) = 1$

$$\Rightarrow (\sec\theta - \tan\theta) = \frac{1}{p} \text{-----Eqn(2)}$$

Adding eqns(1)&(2)

$$\Rightarrow 2\sec\theta = p + \frac{1}{p} = \frac{p^2+1}{p}$$

$$\Rightarrow \sec\theta = \frac{1}{2}\left[p + \frac{1}{p}\right]$$

SSC MTS Free Mock Test

SSC CGL Free Mock Test

SSC CGL Previous Papers (DOWNLOAD PDF)

SSC CGL Tier-2 Previous Papers PDF

SSC CGL Important Questions PDF

1500 + Free Must Solved SSC Questions (With Solutions)

General Science Notes for SSC CGL

Free SSC Study Material (18,000 Solved Questions)

SSC Exam Free Videos (Youtube)

SSC Free Preparation App

Daily Free SSC Practice Set

SSC CGL Free Online Coaching

SSC CHSL Previous Question papers (download pdf)

SSC CPO Previous Question papers (download pdf)

SSC GD Previous Question papers (download pdf)

SSC MTS Previous Question papers (download pdf)

SSC Stenographer Previous Question papers (download pdf)

[SSC CHSL Free Mock Test](#)

[SSC MTS Free Mock Test](#)

[SSC CPO Free Mock Test](#)

[SSC GD Free Mock Test](#)

[SSC Stenographer Free Mock Test](#)

[Free SSC Study Material \(18,000 Solved Questions\)](#)

[Download SSC General Knowledge PDF](#)

[Download SSC Current Affairs Quiz PDF](#)

[Daily Current Affairs PDF for SSC](#)

[Daily Free Online GK tests](#)

[Latest Job Updates on Telegram - Join here](#)