2024-25

ENGLISH MEDIUM

RRB-RPF/RPSF SI

SOLVED PAPERS

Youth Competition Times

RRB-RPF/RPSF

Railway Protection Force/Railway Protection Special Force

SI SUB-INSPECTOR

MALE & FEMALE

SOLVED PAPERS

TCS PATTERN

- RRB RPF SI- 05-01-2019 (Shift-I, II & III)
- RRB RPF SI- 06-01-2019 (Shift-I, II & III)
- RRB RPF SI- 10-01-2019 (Shift-I, II & III)
- RRB RPF SI- 11-01-2019 (Shift-I, II & III)
- RRB RPF SI- 12-01-2019 (Shift-I, II & III)
- RRB RPF SI- 13-01-2019 (Shift-II & III)
- RRB RPF SI- 16-01-2019 (Shift-I, II & III)
- RRB RPF SI- 19-01-2019 (Shift-I & III)
- RRB RPF SI- 24-01-2019 (Shift-I)

23 PAPERS

CBT COMPUTER BASED TEST

Answers with Detailed Analytical Explanation and Based on RRB Answer Key

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RAILWAY RECRUITMENT BOARD (RRB)
Railway Protection Force (RPF)
Exam Date :5-JAN-2019 **Sub Inspector (SI)** **SHIFT-I**

1. The main objective of the industry base Memorandum Scheme is _____.
(a) Encouraging entrepreneurship and promoting start-up
(b) Facilitating a relationship between future job seekers and employers
(c) Promote ease of doing business
(d) Setting up a network of technology and emerging centers

Ans. (c) : The main objective of the industry base Memorandum Scheme is to promote the ease of doing business in the country. The Industry base memorandum scheme was notified in September 2015 under section 8 of the MSME Development Act 2006. This is the path breaking step to promote ease-of doing-business for MSMEs (Micro, Small and Medium Enterprises) in India.

2. Trans-Siberian Railway connects St Petersburg to _____.
(a) Kaliningrad (b) Volgograd
(c) Sochi (d) Vladivostok

Ans. (d) : Trans-Siberian Railway connect St. Petersburg to Vladivostok. It runs on a railway line spanning a length of 9,332 km in Russia. The Trans-Siberian Railway is the world's longest railway line, which connects the far East of Russia with Moscow, the capital of Russia, and the countries of Europe in the west.

3. Mahmud Begda was a famous sultan of which famous empire?
(a) Jaunpur (b) Malwa
(c) Gujarat (d) Bengal

Ans. (c) : Sultan Mahmud Begada (1458-1511), often known as Mahmud Shah I, was the most powerful Sultan of Gujarat Sultanate. He was raised to the throne at a young age, and in fights, he successfully seized the forts of Pavagadh and Junagadh, earning him the name Begada. He formed an alliance with Egypt and Turkey against the Portuguese in India.

4. Which statement is not correct with respect to the Goods and Services Tax (GST)?
(a) Integrated GST will be levied on inter-state goods and services transactions
(b) The concept of declared goods of special importance was abated(c) States will get compensation for five years for loss of revenue
(d) GST will be collected by VAT method

Ans. (b) : Regarding Goods and Services Tax (GST), option (b) is not correct because the concept of declared goods of special importance was not abated. Declared Goods are a number of goods including cereals, certain cotton fabrics, crude oil, iron and steel, etc are declared to be of special importance in Inter state trade or commerce by section 14 of the Central sales Tax Act, 1956. It is significant that Article 286(3)(a) of constitution of India authorizes Parliament to declare some goods as of special importance.

5. What is the unit of kinematic Viscosity?
(a) Candela (b) Poise
(c) Watts (d) Pascal

Ans. (b) :

Physical quantity	Unit
* Kinematic viscosity	Poise
* Luminous intensity	Candela
* Power	Watt
* Pressure	Pascal

6. Which of the following continents is also known by the name 'The Dark Continent'?
(a) Australia (b) Africa
(c) Europe (d) Asia

Ans. (b) : Africa continent is also known by the name 'the Dark continent'. due to obstacles encountered while attempting to explore its interior. Africa is the world's second largest continent both in terms of area and population. Africa continent is separated from Europe by the Strait of Gibraltar.'

7. What is the mineral deposited in the soil of the lower hills and valleys in the sand called?
(a) Load Deposit (b) Placer Deposit
(c) Wayne Deposit (d) Layered Deposit

Ans. (b) : Minerals in the form of soil on the lower surface of the hills and in the sand of the valleys are called Placer deposits. These generally contain minerals which are not eroded by water. Among these minerals, Gold, Silver, Tin and Platinum are prominent.

8. Greenland falls under which of the following continents?
(a) North America (b) Asia
(c) Europe (d) Antarctica

Ans. (a) : Greenland belongs to the continent of North America. It is considered a part of Europe. Greenland is the world's 12th largest country by area and is considered the world's largest island by island area.

9. How many days are organized for the modern Olympic Games organized?
(a) 16 Days (b) 30 days
(c) 45 days (d) 21 days

Ans. (a) : The modern Olympic Games are held for 16 days. The first modern Olympic Games were held in Athens in 1896. It is organized every 4 years.

10. The ravines are generally found in which river basin of India?

(a) Periyar (b) Chambal
(c) Kaveri (d) Vaigi

Ans. (b) : Ravines are commonly found in the Chambal river basin of India. Chambal is a tributary of Yamuna which originates at Janapav hills, near Mhow in Malwa plateau of Madhya Pradesh and flows northwards through a gorge and reaches Kota in Rajasthan, where Gandhi Sagar Dam has been built on it.

11. Which of the following is the rainiest place in the world?

(a) Karup River (b) Trunky
(c) Anamudi (d) Mawsynram

Ans. (d) : Mawsynram is the place with the highest rainfall in the world. Mawsynram receives more than 11,871 mm of rainfall in a year. The village of Mawsynram in East Khasi Hills district of Meghalaya is located around 81 km from Cherrapunji.

12. Who has presided over the first three-member commission for determining the relationship between the Center and the State?

(a) Veerappa Moily (b) M.M. Punchhi
(c) P.V. Rajamannar (d) R S. Sarkaria

Ans. (d) : To determine the relations between the Center and the State, a three-member commission was formed in the year 1983 under the chairmanship of retired judge Shri R.S. Sarkaria. The two other members of this commission were Shri B. Sivaraman and Dr. S.R. Sen.

13. The term "relay" is related to _____

(a) Throwing (b) Running
(c) Fencing (d) Weightlifting

Ans. (b) : The term "relay" is related to Running. In Olympics, 400 meter and 1600 meter relays are held. In modern times, the relay race is a track and field event listed at the Olympic Games under the 'Athletics programme.'

14. How many languages are currently approved in the Indian Constitution?

(a) 21 (b) 24
(c) 26 (d) 22

Ans. (d) : At present, 22 languages are approved in the Indian Constitution. Originally there were only 14 languages in the 8th Schedule of the Constitution. There are provisions related to official language in articles 343-351 mentioned in part 17 of the Indian Constitution.

15. Which of the following states celebrates Hornbill festival every year?

(a) Manipur (b) Nagaland
(c) Assam (d) Sikkim

Ans. (b) : The Hornbill festival is an annual festival celebrated from 1 to 10th of December in the Northwestern Indian state of Nagaland. This festival is called the "Festivals of Festivals." This festival showcases the rice and diverse Naga ethnicity through folk dances, traditional music, local cuisine, handicraft, art workshops, etc. It is significant that the first Hornbill festival was held in December 2000. This festival is organized by the Government of Nagaland on the foundation day of Nagaland State (1 December, 1963)."

16. In which article is the provision of setting up the Finance Commission in the form of a semijudicial body?

(a) Article 300 (b) Article 280
(c) Article 101 (d) Article 279

Ans. (b) : Article 280 (1) provides that the Finance Commission shall consist of a chairman and four other members to be appointed by the President. Finance Commission is a semi judicial and advisory body.

17. Who is the Chairman of the Policy (NITI) Commission?

(a) Prime Minister (b) Finance Secretary
(c) Cabinet Secretary (d) Finance Minister

Ans. (a) : The Prime Minister is the Chairman of NITI Aayog. NITI Aayog was formed by the Central Government on January 1, 2015 in place of Planning Commission. NITI Aayog is the apex public policy think tank of the Government of India.

18. Who wrote the famous book Kama Sutra?

(a) Kalidas (b) Vasumitra
(c) Mahakashyap (d) Vatsyayan

Ans. (d) :

Writer	Book
Vatsyayana	Kama Sutra
Kalidasa	Meghaduta, Raghuvamsa, Kumarasambhava
Vasumitra	Mahavibhasha Sutra

19. Who discovered the X-ray?

(a) Johann Wilhelm Ritter
(b) Wilhelm Conrad Röntgen
(c) Antoine Henry Bekural
(d) Isaac Newton

Ans. (b) :

Scientist	Scientific Discoveries/Inventions
Wilhelm Conrad Roentgen	X-rays
Johann Wilhelm Ritter	UV-Radiation
Antoine Henry Bekural	Radioactivity
Isaac Newton	Laws of Gravity

20. Converting a large punishment to light punishment is called-

(a) Shortening (b) Forgive
(c) Expiration (d) Punishment

Ans. (a) : Converting a large punishment to light sentence is called shortening. Like converting death penalty into rigorous imprisonment. Forgiveness completely releases the criminal from his guilt. Punishment rule means reducing the amount or degree of punishment to the criminal in view of some special circumstances. Like pregnancy, mental condition etc.

21. What is the speciality of making carbon covalent bond with carbon atoms through carbon?

(a) Electrification (b) Ionization
(c) Electrolysis (d) Catenation

Ans. (d) Catenation, chemical linkage into chins of atoms of same element , occurring only among the atoms of an elements that has a valence of at least two and that forms relatively strong bonds with itself.

22. When was the first inter-state council formed?

(a) 1993 (b) 1990
(c) 1991 (d) 1997

Ans. (b) : The first International Council was formed in the year 1990. Provisions related to the Inter-State Council are given in Article 263 of part IX of the Constitution. It is formed by the President.

23. In which of the following states are the Lepakshi Temple situated?

(a) Kerala (b) Karnataka
(c) Andhra Pradesh (d) Tamil Nadu

Ans. (c) : Lepakshi Temple is located in the state of Andhra Pradesh. This temple was built by Virupana and his brother Veerana under the rule of Vijayanagara king Achyuta Deva Raya.

24. Which of the following options is not a personal game?

(a) Long Jump (b) Sprint
(c) Marathon (d) Kho-Kho

Ans. (d) : Kho Kho is not an individual game. This is a team game. There are 12 players involved in this. Individual sports are those sports in which a person involves himself in competition and gets ranking on the basis of his performance so the other option are related to individual sports.

25. Who gave the slogan "Jai Jawan Jay Kisan"?

(a) Sardar Vallabh Bhai Patel
(b) Indira Gandhi
(c) Jawahar Lal Nehru
(d) Lal Bahadur Shastri

Ans. (d) : "Jai Jawan, Jai Kisan" (salutation to the soldier and salutation to the farmer) was the slogan given by Late Lal Bahadur Shastri, and Atal Bihari Vajpayee added "Jai Vigyan" (Salutation to the scientist) to that.

26. In which financial year India signed the Extended Fund Facility Agreement with the IMF?

(a) 2011-12 (b) 1981-82
(c) 1991-92 (d) 2001-02

Ans. (b) : India signed the Extended Fund Facility (EFF) agreement with the IMF in the financial year of 1981-82. India borrowed Special Drawing Rights (SDR) 3.9 billion. It is significant that the Extended Fund Facility provides financial assistance to countries facing serious medium-term balance of payments problems because of structural weaknesses that require time to address.

27. An event in which hot sea waves flowing from the Peruvian coastal region is called.

(a) Indian Ocean Dipole
(b) El Nino
(c) Madden-JulianOscillation
(d) La Nina

Ans. (b) : An event in which hot sea waves flowing from the Peruvian coastal region is called El-Nino. El Nino is the unusual warming of surface waters in the eastern equatorial pacific ocean generally along the coasts of Ecuador and Peru. The term 'El Nino,' which translates to Little Boy, or Christ child in Spanish, was used to characterize the warming of the central and eastern pacific. El Nino events happen irregularly at intervals of 2 to seven years.

28. Khashaba Jadhav, a famous player, belongs to which game?

(a) Shooting (b) Wrestling
(c) Hockey (d) Weightlifting

Ans. (b) : K.D. Jadhav was an Indian freestyle wrestler. Best known for winning bronze medal at the 1952 summer Olympics in Helsinki (capital of Finland). He was the first athlete from independent India to win an individual medal in the Olympics.

29. The virtual force generated due to the rotation of the Earth is called-

(a) Kinetic Force (b) Coriolis force
(c) Pressure Prevalence (d) Gravitational Force

Ans. (b) : The virtual force generated due to the rotation of the Earth is called Coriolis force. It is an apparent force caused by earth's rotation. The Coriolis force is responsible for deflecting winds towards the right in the northern hemisphere and towards the left in the southern hemisphere. This is also known as 'Ferrel's Law.'

30. What is the name of antibiotic containing chlorine which is produced by soil containing microorganisms and is effective for the treatment of typhoid fever?

(a) Chloroquine (b) Chloramphenicol
(c) Chlorogen (d) Chloroethanol

Ans. (b) : Chloramphenicol is the name of antibiotic containing chlorine which is produced by soil containing microorganisms and is effective for the treatment of typhoid fever.

31. What is the international governing body associated with table tennis?

(a) AILA (b) ITTF
(c) FITT (d) APTT

Ans. (b) : The International Table Tennis Federation (ITTF) is the governing body for all National Table Tennis Associations. The ITTF was founded in 1926 by William Henry Lawes and nine founding members countries. The ITTF's current headquarters are located in Lausanne, Switzerland.

32. The lighthouse of the Mediterranean Sea is-

(a) Rainier (b) Stromboli
(c) Etna (d) Sicily

Ans. (b) : The lighthouse of the Mediterranean sea is Stromboli Volcano. This volcano is situated on Stromboli island. Flaming ashes always keep coming out from the Stromboli volcano. It is an active volcano in Italy.

33. Who has the power to make any provision in relation to the acquisition and termination of citizenship?

(a) President (b) Prime Minister
(c) Cabinet (d) Parliament

Ans. (d) : Parliament has the power to make any provision in relation to the acquisition and termination of citizenship. Articles 5 to 11 in Part-II of the Indian Constitution contain provisions related to citizenship.

34. The Administrative Reforms Commission was initially chaired by _____.

(a) Morar ji Desai (b) Veerappa Moily
(c) Hanumanthaiah (d) P.V. Rajamannar

Ans. (a) : The Administrative Reforms Commission was initially chaired by Morarji Desai. On January 5, 1966, the first Administrative Reforms Commission was constituted by the Government of India under the chairmanship of Morarji Desai. After Morarji Desai had joind the Union Council of Ministers, K. Hanumantaiah was appointed the president. On August 31, 2005, the second Administrative Reforms Commission was constituted under the chairmanship of former Chief Minister of Karnataka Veerappa Moily.

35. What is the phenomenon of organisms in which female genome develops to form new creatures without fertilization?

(a) Xenogamy (b) Parthenogenesis
(c) Monogamy (d) Syngamy

Ans. (b) : Parthenogenesis is the phenomenon of organisms in which female genome develops to form new creatures without fertilization. Animals like bees, wasps, ants do not have any sex chromosomes. These organisms reproduce by Parthenogenesis.

36. What is the speed of objects relative to the straight line called ?

(a) Uniform Speed
(b) Transverse Speed
(c) Displacement Speed
(d) Straight Linear Speed

Ans. (d) : The speed of objects relative to the straight line is called Straight Linear Speed. Like, a car moving on a straight road, speed of light, speed of lift etc. The movement of an object can be both linear and angular. The unit of linear speed is meter per second (m/s).

37. Who is the Chairman of the National Development Council?

(a) Prime Minister
(b) President
(c) Finance Minister
(d) Union Home Minister

Ans. (a) : The Prime Minister is the Chairman of the National Development Council (NDC). The National Development Council was formed on August 6, 1952. NDC is the apex body for decision-making and deliberations on development matters in India.

38. The towns of Harappan civilization were placed in _____ pattern.

(a) Circular Grid (b) Rectangular Grid
(c) Square Grid (d) Radial Grid

Ans. (b) : Harappan civilization is known for its urban planning system. The towns of the Harappan civilization were laid out in a rectangular grid pattern. Under this, the roads intersected each other at right angles. The drainage system in the Harappan civilization was very effective.

39. According to the Policy (NITI) Commission, how long has the Indian government made a plan to double the income of the farmers?

(a) 2022 (b) 2025
(c) 2024 (d) 2020

Ans. (a) : According to the Policy (NITI) Commission, the government aims to double farmer's income by the financial year 2022-23 with 2015-16 as the base year. The government of India declared its vision to double the farmer's income through a policy paper of NITI Aayog in March 2017.

40. Which instrument is measured by the transfer of heat?

(a) Hydrometer (b) Manomer
(c) Calorimeter (d) Galvanometer

Ans. (c) : Scientific Instruments Their uses

* Hydrometer	For measuring Relative density of a liquid directly.
* Manometer	To measure the pressure of the fluids using mechanical properties of fluids.
* Calorimeter	To measure the volume and heat produced during a certain time interval.
* Galvanometer	To measure the intensity and direction of electrical current.

41. Under which article can Parliament set a condition for employment within the State or union territory?

(a) Article 26 (b) Article 15
(c) Article 19 (d) Article 16

Ans. (d) : Under Article 16, Parliament may prescribe residence within the State or Union territory as a condition for employment. Article 16 mentions equality of opportunity regarding public employment.

42. The word 'Mahayana' is related to what religion?

(a) Jain (b) Buddhist
(c) Shaiv (d) Sikh

Ans. (b) : The word 'Mahayana' is related to Buddhism. Mahayana is a sect of Buddhism which refers to 'the Great Vehicle.' During the fourth Buddhist Council held at Kashmir (in 72 AD) under the king Kanishka, the Buddhism was divided into two sects namely, Mahayana and Hinayana.

43. By what name is the maintenance of bee hive know?

(a) Apiculture (b) Aviculture
(c) Horticulture (d) Agriculture

Ans. (a) : Kinds of Agriculture Related to

* Apiculture	Bee keeping (rearing of Honeybees)
* Horticulture	Garden cultivation and management
* Vermiculture	Cultivation of Earthworms
* Pisciculture	Fish farming
* Olericulture	Vegetable Farming

44. The ancient Harappan town of Lothal is situated in which state?

(a) Uttar Pradesh (b) Punjab
(c) Gujarat (d) Rajasthan

Ans. (c) : The ancient Harappan town of Lothal is situated in Gujarat. It is located on the banks of the Bhogava River, a right tributary of the Sabarmati River. It had the earliest known dock in the world. Artifacts like jewellery, pottery, seals, religious symbols and objects of daily uses were found in Lothal.

45. Hindola castle and ship mansion are related to which regional architecture style?

(a) Mandu Area (b) Gujarat Zone
(c) Area of Kashmir (d) Bengal Area

Ans. (a) : Hindola castle and ship mansion are related to Mandu Area. Mandu once known as Mandavgarh prospered during the rule of Parmaras. In this town, Indo-Islamic architecture or Afghan architecture style monuments are found.

46. What is the common name of Periplaneta americana?

(a) American Frog
(b) American Cockroaches
(c) American Flatworm
(d) American Earthworm

Ans. (b) : Periplaneta Americana is the scientific name of American cockroach. This cockroach is the largest species of common cockroach. American cockroach has the largest body size, molts 6-14 times (mostly 13 times) before metamorphosis and has the longest life cycle, up to about 700 days. It has an average length around 4 cm and is about 7 mm tall.

47. President's Ordinance _____ can be issued

(a) As per Parliamentary Act on provisions with similar boundaries
(b) On the specially mentioned provisions of the President
(c) On any provision of the Constitution
(d) None of these

Ans. (a) : President's ordinance can be issued in the form of an Act of Parliament with provisions having similar limitations. Under Article 123 of the Indian Constitution, the President has the power to issue ordinances. The provision of ordinance in the Indian Constitution has been taken from the 'Government of India Act 1935.'

48. Who established the Chishti sect in India?

(a) Moinuddin Chishti
(b) Khwaja Nizamuddin Auliya
(c) Khwaja Saleem Chishti
(d) Khwaja Qutbuddin Bakhtiar Kaki

Ans. (a) : Moinuddin Chishti established the Chishti sect in India. He was born in 1141 in Iran. According to legend, he renounced his material belongings after coming in contact with Sheikh Ibrahim Qunduzi. It is significant that the Chishti order is a Sufi order which arose from Chisht, a small town near Herat, in western Afghanishtan. It was founded by Abu Ishaq Shami in about 930 CE. He emphasized the principle of the unity of being (wahdat al-wujud), oneness with God.

49. Which of these is not a major tea growing area of India?

(a) Assam Hills (b) Darjeeling Hills
(c) Kashmir Valley (d) Nilgiri Hills

Ans. (c) : Kashmir Valley is not a tea producing area. The other options given in the question are tea producing areas. In which Assam, Darjeeling and Nilgiri Hills are the most famous and quality producers of tea in India. Tea from Darjeeling has a registered GI tag in 2004 which was the first product to get the GI tag in India.

50. In sports, how many competitions are there in Decathlon?

(a) 3 (b) 8
(c) 10 (d) 5

Ans. (c) : In sports, Decathlon consists of 10 athletics competitions, which are held in groups of five over two days. On the first day, there are 100 meter race, long jump, shot put, high jump and 400 meter race respectively. On the second day, there are 110 meter hurdles, discuss th]
row, pole vault, javelin throw and finally 1500 meter race respectively.

51. In this question, a passage and a statement related to it have been given. Read the passage carefully and review the statement based on it. According to the National Monetary Authority (NMA), the Pune Municipal Corporation (PMC) and the Maharashtra Metro Rail Corporation (Maharashtra-Metro), decided to change the alignment of the Metro project on Ahmednagar Road to protect the Aga Khan Palace. So now the cost of the project will increase to Rs 50 crore for civil works, and the length of the corridor will increase to 900 meters.

Metro officials Atul Gadgil and Prakash Waghmare informed the media on Friday about the decision. "There will be some changes in the Metro corridor near Aga Khan Palace and the length of the route will now increase to 900 meters," the Metro official confirmed this. PMC is yet to give final approval for the planned route.

Statement : The construction of the Metro project will be around 50 crore rupees.

Select one of the following options.

(A) The statement is definitely true.

(B) The statement is probably true.

(C) Statement cannot be determined.

(D) Statement is definitely wrong.

(a) D (b) A

(c) B (d) C

Ans. (a) : The given statement is definitely wrong because it is clear from the passage that the cost of the civil works will be increased to 50 crore rupees not the whole project. Hence option (a) is correct.

52. Change the question mark with the option that follows the logic applied to the first pair.

Plant: Seed :: Flower ??

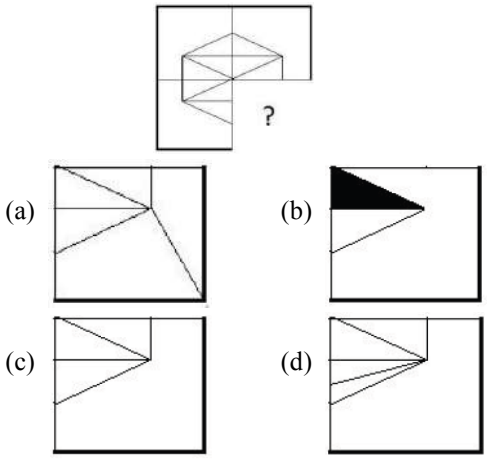
(a) Beautiful (b) Bud

(c) Green (d) Taste

Ans. (b) : Just as, Seed grows into a Plant, simillarly, Bud grows into a Flower.

Hence, ? = Bud

53. Select the correct option that will complete the image pattern of the given image.



Ans. (c) : From above figure it is clear that option (c) will complete the pattern of given image.

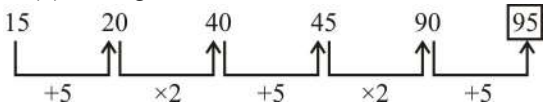
54. Select the next number in the series.

15, 20, 40, 45, 90, ?

(a) 93 (b) 92

(c) 94 (d) 95

Ans. (d) : The given series is as follows-



Hence ? = 95

55. Three statements in this question and three related conclusions have been given to them, assuming that the statements given in the statements to be true are to be considered together on both the findings and to make sure that the information given in the statements is beyond any reasonable doubt which conclusion is logical.

Statement: Some wheat are tea. Some tea are rice. All rice are curry.

Conclusion:

(i) Some curry are tea.

(ii) Some curries are wheat.

(iii) All rice is tea.

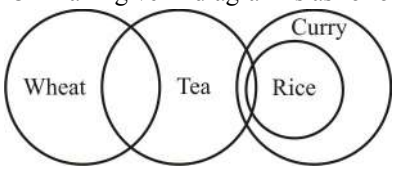
(a) Only (i) is logical.

(b) Only (ii) and (iii) is logical.

(c) Only (i) and (iii) is logical.

(d) Either (ii) or (iii) is logical.

Ans. (a) : On making venn diagram is as follows-



Conclusion :

(i) ✓

(ii) ×

(iii) ×

Hence, it is clear from venn diagram that only conclusion (i) is logical.

56. Carefully read the given information and answer the given questions.

8 people M, N, O, P, Q, R, S and T are sitting around a circular table facing outside (not necessarily in the same order) in such a way that there is a uniform distance between each of them. There are 5 men and 3 women. No two women are sitting together.

(i) M, who is a man, is sitting opposite to S.

(ii) T and N are neighbours.

(iii) N is sitting on the third place from the right of O, who is a woman.

(iv) M is neither the neighbour of O nor the neighbour of N.

(v) One person is sitting between S and N.

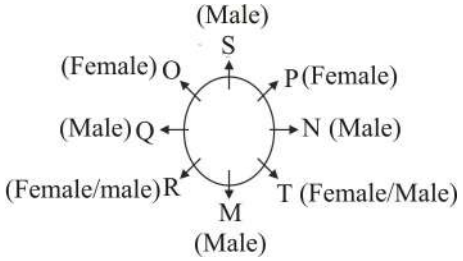
(vi) P is not a neighbour of M but She is sitting in front of R.

Which of the following options is a pair of men?

(a) RO (b) TS

(c) NP (d) QM

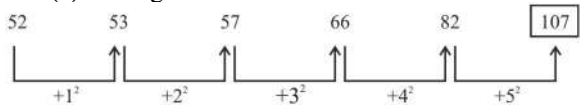
Ans. (d) : According to the question, sitting arrangement is as follows -



Hence, it is clear from above figure that QM is the pair of men.

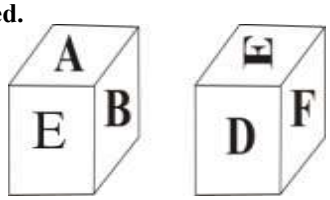
57. Select the next number in the series.
52, 53, 57, 66, 82, ?
(a) 109 (b) 114
(c) 107 (d) 112

Ans. (c) : The given number series is as follows-



Hence, next number will be 107.

58. According to the given figure 6 letters A, B, C, D, E and F are marked on each surface of the dice. Which letter is marked on the surface opposite the surface on which the letter E is printed.



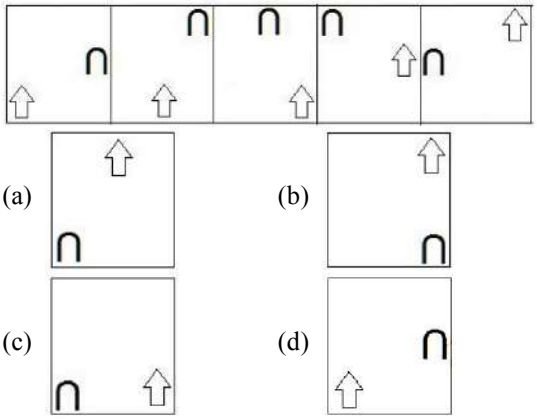
(a) C (b) A
(c) F (d) B

Ans. (a) : On moving clock wise from common surface of given dice,

E A B
↓ ↓ ↓
E F D

From above it is clear that F is the opposite of A and D is the opposite of B then C will be opposite surface of E.

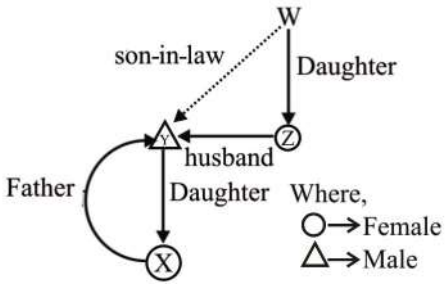
59. Select the appropriate figure to come forward in the given series.



Ans. (a) : In given figure series, next figure will be option (a).

60. Read the following logic and answer the given question.
A @ B, A is B's husband.
A # B, A is the wife of B.
A $ B, A is the son of B.
A% B, A is the daughter of B.
In the equation X% Y @Z% W, how is the relation to the father of X related to W?
(a) Son-in-law (b) Cousin
(c) Father (d) Nephew

Ans. (a) : According to question, blood relation diagram is as follows-



Hence, it is clear from above diagram that father of X is the son-in-law of W.

61. Change the question mark with the option that follows the logic applied to the first pair.
Television: Electricity :: Car: ??
Television:Electricity::Car: ??
(a) Tyre (b) Fuel
(c) Brake (d) Water

Ans. (b) : Just as,
Television $\xrightarrow{\text{energy source}}$ Electricity
Similarly,
Car $\xrightarrow{\text{energy source}}$ Fuel
Hence ? = Fuel

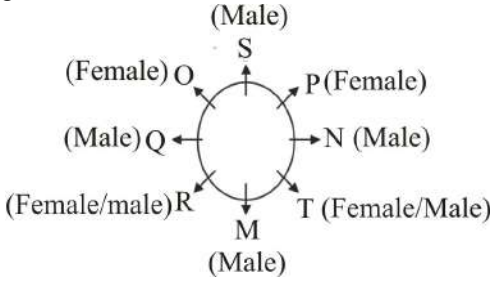
62. Carefully read the given information and answer the given questions.
8 people M, N, O, P, Q, R, S and T are sitting around a circular table facing outside (not necessarily in the same order) in such a manner that there is a uniform distance between each of them. There are 5 men and 3 women. No two women have been sitting together.
(i) M, Who is a man, is sitting opposite to S.
(ii) T and N are neighbours.
(iii) N is sitting on the third place from the right of O, Who is a woman.
(iv) M is neither neighbour of O, nor neighbour of N.
(v) One person is sitting between S and N.
(vi) P is not a neighbour of M but she is sitting in front of R.

How many people are sitting between S and N while counting from the left of N?

(a) 3 (b) 4

(c) 5 (d) 1

Ans. (d) : According to the question sitting arrangement is as follows-



Hence, on counting from the left of N, only one person is sitting between S and N.

63. Carefully read the given information and answer the given questions. 8 people, M, N, O, P, Q, R, S and T are sitting around a circular table facing outside (not necessarily in the same order) in such a manner that there is a uniform distance between each of them. There are 5 men and 3 women. No two women have been sitting together

(i) M, who is a man, is sitting opposite to S.

(ii) T and N are neighbours.

(iii) N is sitting on the third place from the right of O, who is a woman.

(iv) M is neither neighbour of O, nor neighbour of N.

(v) One person is sitting between S and N.

(vi) P is not a neighbour of M but she is sitting in front of R.

Which of the following statements regarding the system is wrong?

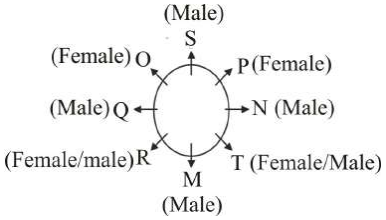
(a) R is sitting at the third position with the right of S.

(b) S and P are neighbours.

(c) Q and N are sitting opposite to each other.

(d) S and N are men.

Ans. (a) : According to question, sitting arrangement of person is as follows-



Hence, it is clear from the above diagram that option (a)'s statement is wrong.

64. A statement in this question and the two conclusions related to them are given in the form of i and ii, assuming that the statements given in the statements to be true are to be considered together on both the findings and to make sure that the information given in the statement Which of the conclusions beyond reasonable doubt is logical?

Statement: Every Monday is a working day. Today is a working day.

Conclusion:

i. Today is Monday.

ii. Only Monday is a working day.

Choose the right one from the following options.

(A) The only conclusion i is rational.

(B) The only conclusion ii is rational.

(C) Either i or ii conclusion is rational.

(D) Eeither i nor ii conclusion is rational.

(E) i and ii both conclusions are rational.

(a) B (b) E

(c) A (d) D

Ans. (d) : According to statement, neither conclusion (i) nor conclusion (ii) is rational. Hence option (d) will be correct answer.

65. In this question, a passage and a statement related to it have been given. Read the passage carefully and review the statement based on it.

According to the National Monetary Authority (NMA), the Pune Municipal Corporation (PMC) and the Maharashtra Metro Rail Corporation (Maharashtra-Metro), decided to change the alignment of the Metro project on Ahmednagar Road to protect the Aga Khan Palace. So now the cost of the project will increase to Rs 50 crore for civil works, and the length of the corridor will increase to 900 meters.

Metro officials Atul Gadgil and Prakash Waghmare informed the media on Friday about the decision. "There will be some changes in the Metro corridor near Aga Khan Palace and the length of the route will now increase to 900 meters," the Metro official confirmed this. PMC is yet to give final approval for the planned route.

Statement: Pune Municipal Corporation (PMC) has approved the alignment changes suggested by Maharashtra-Metro.

Select one of the following options.

(A) The statement is definitely true.

(B) The statement is probably true.

(C) Statement cannot be determined.

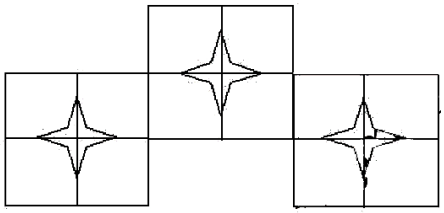
(D) Statement is definitely wrong.

(a) D (b) B

(c) A (d) C

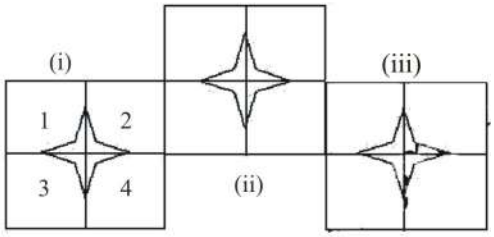
Ans. (a) : The given statement is definitely wrong because it is given that Pune Municipal corporation (PMC) is yet to give final approval, but in the statement it is given that PMC has approved the alignment. Hence option (a) is correct.

66. How many squares are there in the given picture?



(a) 8 (b) 15
(c) 13 (d) 10

Ans. (b) : Number of square in figure (i) similarly number of square in figure (ii) and (iii) are 5 and 5 respectively.



Hence Total number of square = 15

67. In a certain code language, if BROKE is written UEKHN, how will MIXER be written in the same code language?

(a) LPAUH (b) LPTUH
(c) MQSVI (d) MQUVI

Ans. (b) : Just as,

B R O K E
+3 +3 -4 +3 +3
U E K H N

Same as,

M I X E R
+3 +3 -4 +3 +3
L P T U H

Hence, MIXER ⇒ LPTUH

68. In this question, there are three statements showing the relation followed by three conclusions i, ii and iii. Assuming the statements as true, decide which conclusions are completely true in relation to the statements.

Statement. C ≤ U <E; C = O> M ≥ T; M = A> L

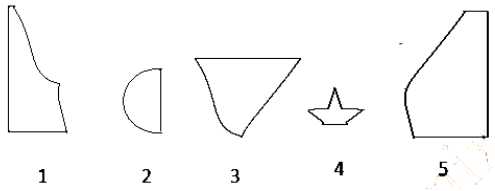
Conclusion :

i) E > M (ii) C ≥ T (iii) L > T

(a) Only iii (b) All
(c) Only i (d) i and ii only

Ans. (c) : From the given statement:
Conclusion :
(i) E > M ……. (✓)
E > U ≥ C = O > M = A > L
(ii) C ≥ T ……. (×)
C = O > M ≥ T
(iii) L > T ……. (×)
T ≤ M = A > L
Hence, it is clear from above that only conclusion (i) is true.

69. Select the correct option from the given options that can make a full square. (3 of the 5 images are given below)



(a) 1,3,5 (b) 1,2,3
(c) 1,4,5 (d) 2,3,4

Ans. (a) : From given figures on adding figure. (1), (3) and (5) a full square can be obtained.
Hence option (a) will be correct answer.

70. Four of the following five are identical in a certain way, so make a group. Which of these is not related to this group?

Q, M, I, S, T

(a) T (b) S
(c) Q (d) M

Ans. (a) : Given,

Q $\xrightarrow{\text{Place Value}}$ 17 (odd)
M $\xrightarrow{\text{Place Value}}$ 13 (odd)
I $\xrightarrow{\text{Place Value}}$ 9 (odd)
S $\xrightarrow{\text{Place Value}}$ 19 (odd)
T $\xrightarrow{\text{Place Value}}$ 20 (even)

From above it is clear that place value of Q, M, I, S are odd Number while place value of T is an even number.
Hence, option (a) is correct.

71. Change the question mark with the option that follows the logic applied to the first pair.

Q: H: S: ??

(a) J (b) A
(c) F (d) M

Ans. (a) : Just as,

Q $\xrightarrow{-9}$ H

Same as,

S $\xrightarrow{-9}$ J

Hence ? = J

72. In a certain code language, if ANNOY is written as ZMMLB, then how will the SOUND be written in the same code language?

(a) HFLMW (b) HLFMW
(c) HLFWN (d) HLFWM

Ans. (b) : Just as,

A N N O Y
opposite letter ↓ ↓ ↓ ↓ ↓
Z M M L B

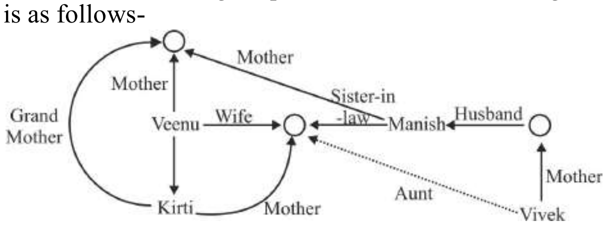
Same as,

	S	O	U	N	D
opposite letter	↓	↓	↓	↓	↓
	H	L	F	M	W

73. Kirti's grandmother, is the mother of Vivek's mother's, husband Manish. Veenu is the father of Kirti. How is mother of kirti related to Vivek?

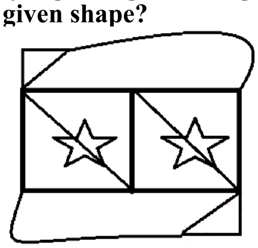
(a) Grandmother (b) Aunt
(c) Mother (d) Cousin

Ans. (b) : According to question blood relation diagram is as follows-



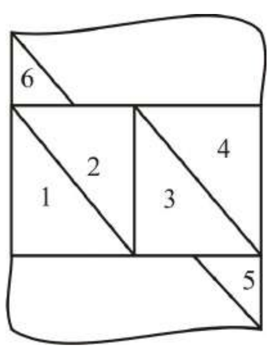
Hence, it is clear from above diagram that mother of Kirti is aunt of Vivek.

74. How many right angled triangles can be made from the given shape?

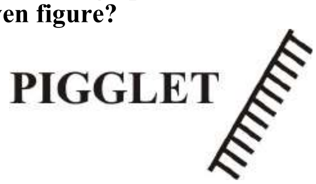


(a) 5 (b) 4
(c) 3 (d) 6

Ans. (d) : In above figure, number of right angled triangle = 6



75. If a mirror is placed on the shaded line, which of the following options is the correct image of the given figure?



(a)  (b) 
(c) (d)

Ans. (c) : When the mirror is placed on the shaded line, the correct mirror image of the given figure is option (c).

76. In this question the relation between different elements has been shown in the statement. After the statement two conclusions have been given.

Statement: $M \leq N < O \geq P < Q$

Conclusion:

(i) $M \geq P$ (ii) $O > M$

Choose the right from the following options.

(A) The only conclusion i is rational.
(B) The only conclusion ii is rational.
(C) Either i or ii conclusion is rational.
(D) Neither i nor ii conclusion is rational.
(E) i and ii both conclusions are rational.

(a) C (b) D
(c) A (d) B

Ans. (d) : From the given Statement-
Conclusion :

$M \leq N < O \geq P < Q$

(i) $M \geq P$ (×)
(ii) $O > M$ (✓)

Hence it is clear from above that only conclusion (ii) is rational.

77. The two statements in this question and the two conclusions related to them are given in the form of i and ii, assuming that the statements given in the statements to be true are to be considered together at both the conclusions and to make sure that the information given in the statement. Which of the conclusions beyond reasonable doubt is logical?

Statement: All teak are banyan. All banyan are wood.

Conclusion:

i) All wood are teak.

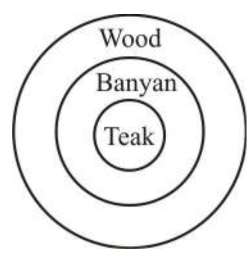
ii) Some banyan are teak.

Select the correct from the following options,

(A) Only conclusion i is logical.
(B) The only conclusion ii is logical.
(C) Either i or ii conclusion is logical.
(D) neither i nor ii conclusion is logical.
(E) i and ii both conclusions are logical.

(a) C (b) E
(c) B (d) A

Ans. (c) : According to the statement venn diagram is as follows :



Hence, it is clear from venn diagram that only conclusion (ii) is logical.

78. Five to four in the following are similar in a certain way, so a group is formed. Which of these is not related to this group?

RNJ, LHD, KGC, MIE, PKF

(a) PKF (b) RNJ

(c) KGC (d) LHD

Ans. (a) : The given letter group is as follows-

$RNJ \Rightarrow R \xrightarrow{-4} N \xrightarrow{-4} J$

$LHD \Rightarrow L \xrightarrow{-4} H \xrightarrow{-4} D$

$KGC \Rightarrow K \xrightarrow{-4} G \xrightarrow{-4} C$

$MIE \Rightarrow M \xrightarrow{-4} I \xrightarrow{-4} E$

$PKF \Rightarrow P \xrightarrow{-5} K \xrightarrow{\boxed{-5}} F$

Hence, PKF is different from other.

79. Choose the right water image of the given question from the given options.

HINDI

(a) HINDI (b) HINDI

(c) HINDI (d) HINDI

Ans. (a) : The correct water image of the given question figure is optain (a).

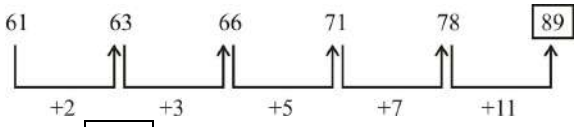
80. Select the next number in the series.

61, 63, 66, 71, 78,?

(a) 98 (b) 89

(c) 90 (d) 80

Ans. (b) : The given number series is as follows-



Hence, $\boxed{? = 89}$

81. Change the question mark with the option that follows the logic applied to the first pair.

2018: 22 :: 2022: ??

(a) 14 (b) 12

(c) 16 (d) 10

Ans. (b) : Just as,

$2018 : 22 \Rightarrow (2 + 0 + 1 + 8) \times 2 = 22$

Same as,

$2022 : ? \Rightarrow (2 + 0 + 2 + 2) \times 2 = 12$

Hence, $\boxed{? = 12}$

82. Four of the following five are similar in a certain way, so form a group. Which of these is not related to this group?

Liquid, Concrete, Solution, Fluid, Juice

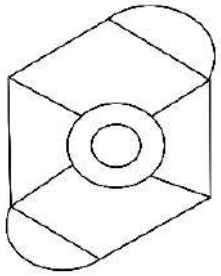
(a) Juice (b) Solution

(c) Concrete (d) Fluid

Ans. (c) : Except concrete all other words are represent liquid form while concrete represent solid form.

Hence "concrete" is not related to the group.

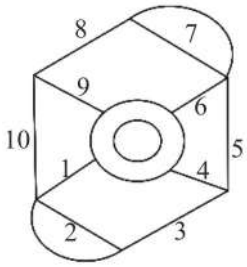
83. How many straight lines are there in the given figure?



(a) 14 (b) 10

(c) 12 (d) 16

Ans. (b) : In above figure, total number of straight lines are 10.



Hence option (b) is correct.

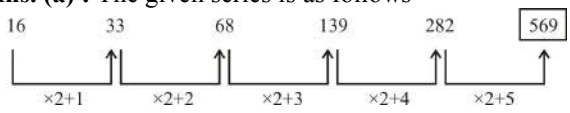
84. Select the next number in the series.

16, 33, 68, 139, 282,?

(a) 569 (b) 560

(c) 585 (d) 570

Ans. (a) : The given series is as follows-



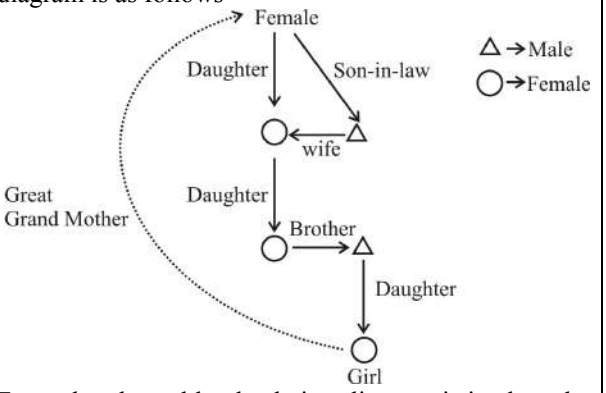
Hence, $\boxed{? = 569}$

85. Referring to a girl, a woman says, "She is the daughter of my son-in-law's wife's daughter's brother." So how is that woman related to that girl?

(a) Mother (b) Great Grandmother

(c) Aunt (d) Grandmother

Ans. (b) : According to the question, blood relation diagram is as follows-



From the above blood relation diagram it is clear that Women is the great grandmother of that girl.

86. If the radius of a circle is increased 19 times, its circumference will become how many times the previous circumference?

(a) 20 (b) 19
(c) 21 (d) 18

Ans. (b) : Circumference of the circle (P_1) = 2πr (where r is the radius of a circle)
On increasing the radius 19 times.
New circumference of the circle (P_2) = 2π × 19r
= 38πr

$$\frac{P_2}{P_1} = \frac{38\pi r}{2\pi r}$$

$$P_2 = 19P_1$$

Hence it is clear that new circumference of the circle is 19 times of the previous circumference of the circle.

87. Selling an item for 440 rupees there is the loss of 60% of the profit received on selling the same item in 1000 rupees. What is the cost price of that item? (In rupees)
(a) 650 (b) 680
(c) 660 (d) 670

Ans. (a) : Let C.P. of item be ₹x
According to question,

$$(x - 440) = (1000 - x)\frac{60}{100}$$

5x – 5 × 440 = 3000 – 3x
5x + 3x = 3000 + 2200
8x = 5200
x = ₹650
Hence C.P. of item = ₹650

88. Find the product of two numbers, whose LCM is 9017 and HCF is 1.
(a) 9015 (b) 9011
(c) 9017 (d) 9013

Ans. (c) : From Formula - L.C.M. × H.C.F. = Ist number × IInd number
∴ Product of two numbers = 9017 × 1 = 9017

89. In the mixture of 84 liters, the ratio of milk and water is 3: 4. If this ratio is changed to 3: 5, then find the amount of excess water (in liters) mixed in the mixture.
(a) 11 (b) 13
(c) 14 (d) 12

Ans. (d) : According to the question-

$$\text{In 84 litre mixture, milk's quantity} = 84 \times \frac{3}{3+4}$$

= 36 litre
and water's quantity = 84 – 36 = 48 L
Let the amount of additional water added to the mixture be x litres
According to question.

$$\frac{36}{48+x} = \frac{3}{5}$$

36 × 5 = 3 × 48 + 3x
180 = 144 + 3x
3x = 36
x = 12
Hence the amount of excess water mixed in the mixture is 12 leters.

90. Martin donated 13% of his salary to an organization working for the blind people, 12% of his salary to an orphanage, 14% of his salary to the institution working for the physically challenged people, and 16% of his salary to Doctoral Assistance Institution The remaining amount Rs. 42,750 is deposited in the bank for monthly expenditure. Find out the amount donated in the orphanage.
(a) ₹ 14,400 (b) ₹ 13,400
(c) ₹ 11,400 (d) ₹ 12,400

Ans. (c) :
Percentage of salary spent for different work by Martin = 13 + 12 + 14 + 16 = 55%
Percentage of remaining amount = 100 - 55 = 45%
According to question,
45% of total salary = 42750

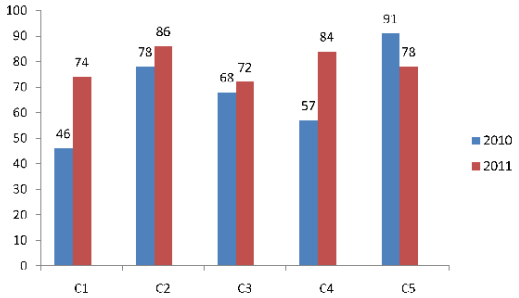
$$\text{Martin's monthly salary} = 42750 \times \frac{100}{45}$$

Hence, the amount donated in the orphanage

$$= 42750 \times \frac{100}{45} \times \frac{12}{100}$$

= ₹11400

91. Instructions:
Study the following bar graph and answer the question based on it :
Sales of books (in thousand rupees) given in two successive years of 2010 and 2011 of five branches of a publishing company have been given.
Find out the average (in thousands) of sales for all branches in 2010.



(a) 72 (b) 68
(c) 66 (d) 74

Ans. (b) : Form the given bar graph
∴ Average sales of all branches in 2010 (in thousands)

$$= \frac{46 + 78 + 68 + 57 + 91}{5}$$

= 68 thousand

92. A person travels from the hostel to the college with a speed of 15 kmph from the bicycle and reaches a 4.5 minute delay. If he runs a bike with the speed of 20 kmph, then he reaches 4.5 minutes early. Describe the distance between hostel and college. (In km)
(a) 8 (b) 6
(c) 9 (d) 7

Ans. (c) :
Let the distance between Hostel and College be x km.
According to question,

$$\frac{x}{15}-\frac{x}{20}=\frac{4.5+4.5}{60}$$

$$\frac{4x-3x}{60}=\frac{9}{60}$$

$$x = 9$$

Hence the distance between Hostel and College = 9 km.

93. In one box, three different types of old coins are in the ratio of 3: 5: 7, the value of old coins is Rs. 1, 5 and 10 rupees respectively. If the total price of coins kept in the box is 686, then find the number of old coins of 10 rupees.

(a) 48 (b) 51
(c) 50 (d) 49

Ans. (d) : Let the number of coins of ₹1, ₹5, ₹10 be 3x, 5x and 7x respectively.
According to question,

$$3x \times 1 + 5x \times 5 + 7x \times 10 = 686$$

$$98x = 686$$

$$x = \frac{686}{98} = 7$$

Hence, the number of coins of ₹10 = 7x
= 7 × 7
= 49 coins

94. An amount of ₹7,600 is invested on simple interest at an annual rate of 8%. If after 5 years the amount was withdrawn and half the amount of the total amount was invested in the stock market. Find the remaining amount (in rupees) is :

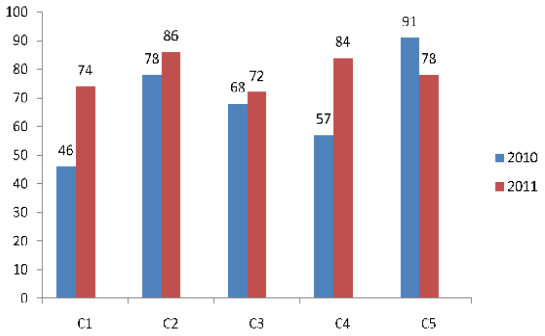
(a) 5,420 (b) 5,220
(c) 5,210 (d) 5,320

Ans. (d) : Simple Interest on ₹7600 at 8% per annum in 5 years $= \frac{7600\times8\times5}{100} = ₹3040 = SI$
Amount = 7600 + 3040 = ₹10640
The amount left after investing half the amount in the share market $= = 10640\times\left(1-\frac{1}{2}\right)$

$$= 10640\times\frac{1}{2}$$

$$= ₹\ 5320$$

95. Instructions.
Study the following bar graph and answer the question basis on it :
Sales of books (in thousand) has been given in two consecutive years of 2010 and 2011 of five branches of a publishing company.
Find out the ratio of the total sales done in both the years of branch C2 and the total sales in both years of branch C4.



(a) 163:140 (b) 161:138
(c) 164:141 (d) 162:139

Ans. (c) : In both the years total sales of branch C_2
= 78 + 86 = 164
In both the years total sales of branch C_4= 57 + 84 = 141
Hence required ratio = 164 : 141

96. When a number is divided by 119, the remainder remains 10. When the same number is divided by 17, what will be the remainder?

(a) 7 (b) 9
(c) 8 (d) 10

Ans. (d) : Let the number is = 119 + 10 = 129
∴ On dividing 129 by 17, we get remainder 10
{∵ 119 is also divisible by 17, so the remainder will be the same}
∴ Remainder = 10

97. Solve.
$324^2 \times 72 \div 18^5 \times 1021 = ?$

(a) 4054 (b) 4064
(c) 4074 (d) 4084

Ans. (d) : $324^2 \times 72 \div 18^5 \times 1021$
$\{(18)^2\}^2 \times 18 \times 4 \div 18^5 \times 1021$
$18^5 \times 4 \div 18^5 \times 1021$
4×1021
$= 4084$

98. Find the number of trailing zeros in 375!.

(a) 93 (b) 94
(c) 92 (d) 91

Ans. (a) : Number of trailing zero in 375!

$$= \frac{375}{5}+\frac{375}{25}+\frac{375}{125}$$

$$= 75 + 15 + 3$$

$$= 93$$

Hence the total number of zeros = 93

99. If a shopkeeper hikes the purchasing value of an item by 46% and gives it a discount of 46% on the face value for selling it, then what the total percentage gain or loss will it have?

(a) 21.16% profit (b) 20.04% Loss
(c) 20.04% Profit (d) 21.16% Loss

Ans. (d) : Let C.P. of the item be 100
Market Price = ₹146

$$\text{After 46\% discount, SP} = 146\times\frac{(100-46)}{100}$$

$$SP = 146 \times \frac{54}{100} = ₹ 78.84$$

Loss = 100 – 78.84 = 21.16

$$\text{Loss\%} = \frac{21.16}{100} \times 100$$

$$= 21.16\%$$

100. Total area of the piece of glass square is 1444 cm^2, which is placed above a table. The width between the table and the edge of the glass piece is 9 cm. Find the length of the table (in cm).

(a) 54 (b) 58

(c) 52 (d) 56

Ans. (d) : Total area of the piece of glass square = 1444 cm^2

$Side^2 = 1444\ cm^2$

Width between the table and the edge of the piece=9 cm

Side of piece of glass square $= \sqrt{1444}$

= 38 cm

$\therefore$ Total length of the table = 38 + 9 × 2 = 56cm

101. A train takes 57 seconds to cross the 204 m long bridge. If the same train takes 23 seconds to cross a signal board, Find the length of the train. (In meters)

(a) 138 (b) 128

(c) 118 (d) 148

Ans. (a) : Let the length of train be x meter.

According to question,

$$\frac{204 + x}{57} = \frac{x}{23}$$

$$204 \times 23 + 23x = 57x$$

$$57x - 23x = 204 \times 23$$

$$x = \frac{204 \times 23}{34} = 138$$

Hence the length of the train = 138m

102. At the rate of any compound interest rate, a sum gets tripled in 4 years, in how many years it will become 2187 times its own?

(a) 22 (b) 26

(c) 28 (d) 24

Ans. (c) : Let the principal be x, then

$$x\left(1 + \frac{r}{100}\right)^4 = 3x$$

$$\left(1 + \frac{r}{100}\right)^4 = 3 ----(i)$$

Let the amount become 2187 times itself in n years.

$$x\left(1 + \frac{r}{100}\right)^n = 2187\,x$$

$$\left(1 + \frac{r}{100}\right)^n = 3^7$$

From eq (i)

$$\left(1 + \frac{r}{100}\right)^n = \left\{\left(1 + \frac{r}{100}\right)^4\right\}^7$$

$$\left(1 + \frac{r}{100}\right)^n = \left(1 + \frac{r}{100}\right)^{28}$$

On Comparing both the sides

$\therefore$ n = 28 years

103. A person travels at the speed of 16kmph, 24kmph and 12kmph on the surface of an equilateral triangle on the ground. Find the average speed of the entire journey. (In Kmph)

(a) 16 (b) 17

(c) 15 (d) 18

Ans. (a) : Let the side of an equilateral triangle ground = x km

Then average speed = $\frac{\text{Total distance}}{\text{Total time}}$

$$\frac{x + x + x}{\frac{x}{16} + \frac{x}{24} + \frac{x}{12}}$$

$$= \frac{3x \times 48}{3x + 2x + 4x}$$

$$\frac{3x \times 48}{9x}$$

= 16 km/h

104. A shopkeeper sells a product in Rs.2,367 and earns 12.5% profit. Find the amount that is equal to half of the purchase price of the product (in Rs.)

(a) 1,052 (b) 1,062

(c) 1,042 (d) 1,032

Ans. (a) : Let C.P. of product = ₹ x

According to question,

$$x \times \frac{(100 + 12.5)}{100} = 2367$$

$$x = 2367 \times \frac{100}{112.5}$$

$$x = 2367 \times \frac{8}{9}$$

$$x = ₹\ 2104$$

Hence half of the C.P. $= \frac{2104}{2} = ₹\ 1052$

105. Aamir distributed 875 gifts among 4 children. The part of the first child is twice the portion of the second child, three times the part of the third child and four times the fourth child's share. Find the sum of the total gifts received by the first and the second child.

(a) 610 (b) 630

(c) 620 (d) 640

Ans. (b) : Let the gift received by the first child = 12x

Gift received by the second child = $12x \times \frac{1}{2} = 6x$

Gift received by the third child = $12x \times \frac{1}{3} = 4x$

Gift received by the fourth child = $12x \times \frac{1}{4} = 3x$

Sum of total gifts $\Rightarrow$ 12x + 6x + 4x + 3x = 875

$\Rightarrow$ 25x = 875

$$x = \frac{875}{25}$$
$$x = 35$$

Hence the sum of the total gifts received by the first and the second child = 12x+6x
$$= 18x$$
$$= 18 \times 35 = 630$$

106. A gift box has 10 bangles. The average weight of the first 4 bangles is 57gms and the average weight of the remaining 6 bangles is 58 gms. Find the average weight of all bangles (in grams)

(a) 57.4 (b) 57.2
(c) 57.6 (d) 57.8

Ans. (c) : Average weight of all 10 bangles
$$= \frac{4 \times 57 + 6 \times 58}{10}$$
$$= \frac{228 + 348}{10}$$
$$= 57.6$$

107. The average weight of 71 notebooks kept in a box is 7.1 kg. When a new notebook is placed in the box, then the average is 7.2kg. What is the weight of the new notebook. (In Kg)

(a) 14.3 (b) 14.6
(c) 14.4 (d) 14.5

Ans. (a) : According to question.
Weight of the new notebook.
$$= 72 \times 7.2 - 71 \times 7.1$$
$$= 518.4 - 504.1$$
$$= 14.3 \text{ kg}$$

108. A bulb producing company found 13% of the total product defective. If the total number of non-defective products is 4959, then find the number of total defective products.

(a) 751 (b) 731
(c) 741 (d) 761

Ans. (c) : Let the total number of product be x
According to question,
$$x \times \frac{(100-13)}{100} = 4959$$
$$x \times \frac{87}{100} = 4959$$
$$x = \frac{4959 \times 100}{87} = 5700$$

Hence the number of total defective products
$$= 5700 - 4959 = 741$$

109. Find the value of x.

$$\frac{2}{5}(x) + \frac{3}{10}(x) - \frac{3}{5}(x) = 531$$

(a) 5210 (b) 5410
(c) 5310 (d) 5510

Ans. (c) : $\frac{2}{5}x + \frac{3}{10}x - \frac{3}{5}x = 531$
$$\frac{4x + 3x - 6x}{10} = 531$$
$$x = 531 \times 10$$
$$x = 5310$$

110. Vimal received 72 out of 80 marks in French, 91 out of 100 in English, 63 out of 70 in Spanish and 44 out of 50 in Japanese. What was the total percentage achieved by him? (in%)

(a) 70 (b) 100
(c) 80 (d) 90

Ans. (d) : Total marks obtained by Vimal in all subjects = 72 + 91 + 63 + 44 = 270
Total marks of all subjects = 80 + 100 + 70 + 50 = 300
$\therefore$ Required percentage = $\frac{270}{300} \times 100 = 90\%$

111. Sheila walks at the speed of (20/21) her usual speed and covers a certain distance in six minutes more than the time she takes at normal speed. Calculate the normal time she takes in covering a certain distance.

(a) 130 (b) 120
(c) 140 (d) 150

Ans. (b) : Let the normal speed of sheila be S and the normal time be t
According to the question,
$$S \times t = \frac{20}{21} S \times (t + 6)$$
$$\Rightarrow \quad \frac{21}{20} t = t + 6$$
$$\Rightarrow \quad \frac{t}{20} = 6$$
$$\Rightarrow \quad t = 120 \text{ minutes}$$

Hence normal time = 120 minutes

112. If a cube of diagonal $26\sqrt{3}$ cm is melted and converted into a cuboid, what will be its height, if the length of the cuboid is equal to the side of the cube, and the breadth of the cuboid is 13 cm? (in cm).

(a) 52 (b) 54
(c) 53 (d) 55

Ans. (a) : Let the side of cube be 'a' cm
Diagonal of cube = $a\sqrt{3} = 26\sqrt{3}$
$$a = 26\text{cm}$$

According to the question,
Volume of cube = volume of cuboid
$$26 \times 26 \times 26 = 26 \times 13 \times h$$

Hence, the height of the cuboid (h) = $\frac{(26)^3}{13 \times 26}$
$$= 52 \text{ cm}$$

113. Find the value of x.

$$\sqrt{441} \div 21 + \sqrt{484} = 1 \times x$$

(a) 26 (b) 25
(c) 23 (d) 24

Ans. (c) : $\sqrt{441} \div 21 + \sqrt{484} = 1 \times x$

$21 \div 21 + 22 = 1 \times x$

$1 + 22 = 1 \times x$

$\boxed{x = 23}$

114. How many ways 378 mobile phones be shared equally in the students present in the classroom?

(a) 18 (b) 16

(c) 14 (d) 12

Ans. (b) : On factorizing, $378 = 3 \times 3 \times 3 \times 7 \times 2$

Total number of factors of $378 = 3^3 \times 7^1 \times 2^1$

Required number of ways = $(3+1)\times(1+1)\times(1+1)$

$= 4 \times 2 \times 2 = 16$

115. An English-based company has 629 male and 629 female employees in a collaborative project. The average productivity of all employees is 72 calls per day. An average of 72 calls are received by a male employee every day. What will be the average of the number of calls being recieved by the female staff daily?

(a) 72 (b) 74

(c) 71 (d) 73

Ans. (a) : Number of total calls received by male and female = $(629+629) \times 72$

Number of total calls received by only male = 629×72

Number of total calls received by female

$= 2 \times 629 \times 72 - 629 \times 72$

$= 629 \times 72$

$\therefore$ Average call received by female employee

$= \dfrac{629 \times 72}{629} = 72$

116. The station master decides that the length of the rectangular digital board is increased by 4% and the width is reduced to 6%. Find out the total change in the area.

(a) 1.24% reduction

(b) 2.24% increase

(c) 2.24% reduction

(d) 1.24% increase

Ans. (c) : According to question,

Required change in area of rectangular digital board

$= +4 - 6 - \dfrac{4 \times 6}{100}$

$= -2 - 0.24$

$= -2.24\%$

$= 2.24\%$ reduction

117. The difference between earned interest on the same amount invested for 2 years on compound interest and simple interest is Rs. 76. If interest rates are 4% per year, then calculate the amount invested. (In rupees)

(a) 51,500 (b) 47,500

(c) 48,500 (d) 49,500

Ans. (b) : For two years, difference of compound interest and simple interest = $P\left(\dfrac{R}{100}\right)^2$

$\Rightarrow \quad P \times \left(\dfrac{4}{100}\right)^2 = 76$

$\Rightarrow \quad P = 76 \times \dfrac{100}{4} \times \dfrac{100}{4} = ₹\,4,7500$

Hence invested amount = ₹4,7500

118. Solve.

$15.73 + 13.25 + 16.73 - 28.64 = 3 \times ?$

(a) 5.69 (b) 5.49

(c) 5.59 (d) 5.79

Ans. (a) : $15.73 + 13.25 + 16.73 - 28.64 = 3 \times ?$

$45.71 - 28.64 = 3 \times ?$

$17.07 = 3 \times ?$

$? = \dfrac{17.07}{3}$

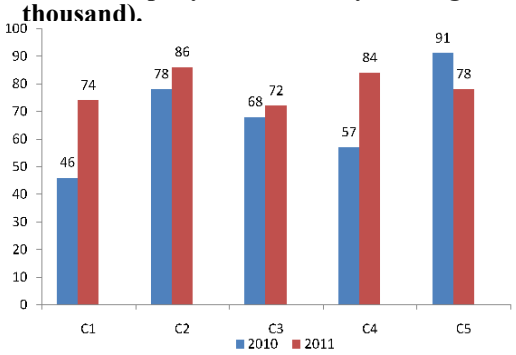
$\boxed{? = 5.69}$

119. Instructions:

Study the following bar graph and answer the question on the basis:

Sales of books (in thousand rupees) given in two successive years of 2010 and 2011 of five branches of a publishing company have been given.

What is total sales of branches C1, C3 and C5 of the company in both the years together (in thousand).



(a) 439 (b) 419

(c) 429 (d) 409

Ans. (c) : From the given bar graph,

Total sales of branches C_1, C_3 and C_5 in the both year = $46+74+68+72+91+78$

= 429 thousand

120. The proportion of salaries of Hameed, Clement and Ganesh is 3: 5: 7, respectively, if Ganesh is getting Rs.892 more from Hameed. What is Clement's salary? (In rupees)

(a) 1,145 (b) 1,115

(c) 1,125 (d) 1,135

Ans. (b) : Let the salaries of Hamid, Clement and Ganesh be 3x, 5x and 7x respectively.

According to question,

$7x - 3x = 892$

$4x = 892$

$x = \dfrac{892}{4}$

$x = 223$

Hence Clement's salary = $5x = 5 \times 223 = ₹\,1115$

RAILWAY RECRUITMENT BOARD (RRB)
Railway Protection Force (RPF)
Exam Date :5-JAN-2019 **Sub Inspector (SI)** **SHIFT-II**

1. Which of these is the largest island in the world?
(a) Maldives (b) Finland
(c) Greenland (d) Seychelles

Ans. (c): The largest island in the world is Greenland, situated in the North Atlantic Ocean. The capital and largest city of Greenland is Nuuk. The economy is primarily dependent on fishing and mining industries. Greenland is an autonomous territory within the Kingdom of Denmark. It is located between the Arctic and Atlantic Oceans, east of the Canadian Arctic Archipelago. Greenland is known for its vast ice sheet, which covers about 80% of the island's surface, making it the second-largest ice sheet in the world. Most of the vegetation on the island exists on the tundra, away from the ice sheets. Low-growing plants like dwarf birch and whortleberry, as well as mosses and lichens, can be found throughout the Tundra. Many marine mammals live in the seas around the island, including seals, walruses, and whales.

2. Sultan Azlan Shah Cup is associated with which of these sports?
(a) Hockey (b) Golf
(c) Rowing (d) Chess

Ans. (a) : The Sultan Azlan Shah Cup is an annual international field hockey tournament held in Malaysia. It is named after the ninth Sultan of Perak, Sultan Azlan Shah, who was an avid supporter of field hockey. GOLF-Walker Cup, Eisenhower Trophy, Princes of Wales Cup, Ryder Trophy. POLO - Winchester Cup, Ezar Cup. CHESS- Naidu Trophy, Khaitan Trophy, Limca Trophy, Linares City Trophy. ROWING -Beefeather's Gin.

3. What is the time period formula?
(a) Frequency/2 (b) 2/Frequency
(c) Frequency/4 (d) 1/Frequency

Ans. (d) : Time period of a thing is the amount of time required for it to complete its one oscillation. The formula for time is: – T = 1/f, where T is period and f is frequency.

4. The Chairman of the Lok Sabha will have to send his resignation letter.
(a) Prime Minister
(b) President
(c) Deputy Speaker of Lok Sabha
(d) Ministers of Parliamentary Affairs

Ans. (c) : A Speaker is the presiding officer of the Lok Sabha. Usually the speaker remains in office during the life of the lok sabha. However he can resign earlier by writing to the deputy speaker of the Lok Sabha. Article 94 of Indian constitution tells us about ,action and resignation of, and removal from, the offices of speaker and deputy speaker A member holding office as speaker or deputy speaker of the House of the People.

5. What is the formula of baking soda?
(a) $NaHCO_2$ (b) Na_2CO_4
(c) Na_2CO_3 (d) $NaHCO_3$

Ans. (d) : Baking soda is the common name of sodium bicarbonate. The chemical formula of baking soda is $NaHCO_3$.
- Sodium Carbonate is the chemical name for 'washing soda' (Na_2CO_3. $10H_2O$.). It is the water-soluble sodium salt of carbonic acid.
- The chemical formula of bleaching powder is $CaOC_{l2}$.
- The formula for lime water is $Ca(OH)_2$ and the chemical name for lime water is calcium hydroxide.

6. Who is the Indian player to score the first century in the Indian Premier League (IPL)?
(a) Rohit Sharma (b) Virat Kohli
(c) Shikhar Dhawan (d) Manish Pandey

Ans. (d) : The first Indian batsman to hit a century in the Indian Premier League (IPL) was Manish Pandey. He achieved this milestone while playing for the Royal Challengers Bangalore in the 2009 season.
- Brendon Mc Cullum scored the first ever century in the history of the IPL.

7. Where is the Martand Sun temple situated?
(a) Varanasi (b) Shimla
(c) Kashmir (d) Madurai

Ans. (c) : The Martand Sun temple also known as Martand Surya Mandir, is located in Anantnag, Kashmir, India. It is an ancient Hindu temple dedicated to the Sun God. It was built during the 8^{th} century by King Lalitaditya Muktapida of the Karkota dynasty.

8. Which of the following years was declared as International Rice Year by the United Nationals?
(a) 2005 (b) 2006
(c) 2004 (d) 2007

Ans. (c) : The year 2004 was declared as the International Year of Rice by the United Nations.
These are the international years observed by the United Nations.
- 1959/1960-World Refugee Year
- 1968- International Year for Human Rights
- 1970-International Education Year
- 1974-World Population Year
- 1975-International Women's Year
- 1979-International Year of The Child
- 1986- International Year of Peace

9. The compilation of Kabir's compositions is called.

(a) Abhanga (b) Dasbodh
(c) Mode (d) Bijak

Ans. (d) : Bijak is the compilation of the verses of Kabir. It comprises three main sections called Sakhi, Ramaini, and Shabda and a fourth section containing miscellaneous folk song forms. The Sakhi is composed in the Doha or couplet form.

10. What is the surname of Harbhajan Singh?

(a) The Wal
(b) Jamie
(c) Flying Man
(d) The Turbanator

Ans. (d) : Harbhajan Singh, the Indian cricketer, is often affectionately referred to as the "Turbanator" due to his distinctive turban and his prowess as a spin bowler in the game of cricket.

• Rahul Dravid, the former Indian cricketer, is often known by the nickname "The Wall." This nickname reflects his exceptional batting skills and his ability to defend the wicket with great resilience and consistency.

11. When was 'Dandi March' organized?

(a) 1940 (b) 1947
(c) 1930 (d) 1950

Ans. (c) : The Salt Satyagraha, also known as the Salt March or Dandi March, began on March 12, 1930. Led by Mahatma Gandhi, this nonviolent protest against the British salt monopoly played a significant role in India's struggle for independence. Mahatma Gandhi walked for a total of 24 days during Dandi March, covering a distance of approximately 240 miles and concluded on April 6, 1930, when Gandhi reached the coastal village of Dandi, breaking the salt laws and sparking a larger civil disobedience movement against British rule in India.

12. The process of loosening and folding the soil is called.

(a) Ploughing (b) Weeding
(c) Soup (d) Sow

Ans. (a) : Ploughing is a process in agriculture where a plough, a farming implement, is used to turn over the soil, break it up, and create furrows for planting seeds. This activity helps in preparing the soil for cultivation by aerating it, improving drainage, and burying crop residues. Ploughing is a fundamental step in traditional and modern farming practices to enhance soil quality and create a suitable environment for plant growth.

13. When did the Rangpur rebellion happen?

(a) 1689 (b) 1986
(c) 1783 (d) 1729

Ans. (c) : The Rangpur revolt refers to a peasant uprising that took place in Rangpur district (now in Bangladesh) during the colonial period in British India. It occurred in 1783-1784 and was led by Tilakdhari, a zamindar (landlord) who became a symbol of resistance against the oppressive policies of the East India Company.

14. Announcement of new Foreign Trade Policy in India has been done for the year.

(a) 2016-21 (b) 2017-22
(c) 2014-19 (d) 2015-20

Ans. (d) : The new announcement of Foreign Trade Policy in India has been done for the year. 2015- 20 focuses upon increasing exports of goods and services as well as generation of employment and is integrated with three important missions of the Union Government – Make in India, Digital India and Skills India. It aims at process re-engineering and automation to facilitate ease of doing business for exporters. It also focuses on emerging areas like dual use high end technology items under SCOMET, facilitating e-commerce export, collaborating with States and Districts for export promotion.

15. Which of these crops is not an oil crop?

(a) Mustard (b) Sesame
(c) Peanut (d) Millet

Ans. (d) : Oil crops constitute industrially important crops with high economic value for domestic use and high export potentials in all over the world. Phytoplasma diseases cause severe economic losses to many oil crops viz., sesame, peanut, mustard, soybean, sunflower, linseed, and canola in Asia. Barley is the fourth most important cereal crop in the world after wheat, maize, and rice. Although generally a temperate crop, barley is also grown in many tropical countries, typically by poor farmers in hostile, dry, cool environments. It is not oil producing crop.

16. According to 2011, which of the following Union Territories of India is the lowest sex ratio state?

(a) Delhi
(b) Andaman and Nicobar Islands
(c) Daman and Diu
(d) Lakshadweep

Ans. (c) : In the Population Census of 2011 it was revealed that the population ratio in India 2011 is 943 females per 1000 males. Haryana has the lowest sex ratio (877) in Indian states while in Union Territory Daman & Diu has lowest sex ratio of 618. Kerala has the highest sex ratio of 1084 in the all Indian states.

17. Who won the Women's Singles title at US Open 2018?

(a) Serena Williams (b) Naomi Osaka
(c) Simona Halep (d) Sania Mirza

Ans. (b) : In a breakout performance at the 2018 US Open, Naomi Osaka defeated Serena Williams to become Japan's first-ever tennis player to win a Grand Slam singles title. Coco Gauff defeated Aryna Sabalenka in the final, to win the women's singles tennis title at the 2023 US Open. It was her first major title.

18. The Republic of India has _____ states and _____ Union Territories.

(a) 29 and 7 (b) 28 and 8
(c) 28 and 7 (d) 29 and 11

Ans. (a) : At the at times question India had 29 states and 7 Union Territories but currently there are 28 states and 8 Union territories in the country.

19. Who is the Chairman of the Seventh Central Pay Commission?

(a) MK Jain
(b) NS Vishwanathan
(c) S. Gurumurthy
(d) Ashok Kumar Mathur

Ans. (d) : The chairman of Seventh Pay Commission is Justice Ashok Kumar Mathur. First pay commission was constituted in 1946 in the chairmanship of Shri Srinivasa Varadacharia.

20. How many parliamentary constituencies are seats are there in Union Territory of Puducherry?

(a) 3 (b) 1
(c) 2 (d) 4

Ans. (b) : Here is the list of distribution of Lok Sabha seats in Union Territories of India:-Delhi- 7, Jammu and Kashmir -5, Ladakh-1, Andaman and Nicobar Islands-1, Chandigarh-1, Dadra and Nagar Haveli and Daman and Diu- 2, Lakshadweep- 1 and Puducherry- 1

21. In which of these countries is the Gobi Desert located?

(a) U.S.A (b) Chile
(c) Mongolia (d) Japan

Ans. (c) : The Gobi Desert is situated in northern China and southern Mongolia, covering parts of both countries in East Asia. It is a cold desert, characterized by its harsh climate with low precipitation and extreme temperatures. It experiences both very cold winters and hot summers.

Here are a few other important deserts and their locations:

- Sahara Desert: Located in North Africa, it is the largest hot desert in the world.
- Arabian Desert: Situated in Western Asia, it spans parts of several countries including Saudi Arabia, Yemen, Oman, and others.
- Karakum Desert: Found in Central Asia, it covers parts of Turkmenistan.
- Atacama Desert: Situated in South America, primarily in Chile, it is one of the driest deserts on Earth.
- Sonoran Desert: Located in North America, it spans parts of the United States and Mexico.
- Kalahari Desert: Found in Southern Africa, covering parts of Botswana, Namibia, and South Africa.

22. Kaziranga National Park is situated-

(a) Assam (b) Haryana
(c) New Delhi (d) Gujarat

Ans. (a) : Kaziranga is situated in the state of Assam and is famous for its conservation efforts for the Indian one-horned rhinoceros. Kaziranga was declared a national park in 1974, it was officially designated as a Tiger Reserve in 2007. It has become a UNESCO World Heritage Site in 1985.

Here are a few notable ones along with their locations:

- Jim Corbett National Park: Located in Uttarakhand, it is the oldest national park in India.
- Ranthambhore National Park: Located in Rajasthan, it is known for its Bengal tigers.
- Sundarbans National Park: Straddling West Bengal and Bangladesh, it is the largest mangrove forest and a UNESCO World Heritage Site.
- Bandipur National Park: Situated in Karnataka, it is known for its wildlife and biodiversity.
- Periyar National Park: Located in Kerala, it is known for its diverse ecosystems and a tiger reserve.
- Gir National Park: Situated in Gujarat, it is the only natural habitat of the Asiatic lion.

23. Which of these is the natural source of oxalie acid?

(a) Milk (b) Tomato
(c) Ants Sting (d) Lemon

Ans. (b) : Tomatoes do contain oxalic acid, but in relatively low amounts compared to some other foods like Spinach, Rhubarb, Beets, Parsley etc.

Here are a few examples of acids and their natural sources:

- Citric Acid: Found in citrus fruits such as oranges, lemons, limes, and grapefruits. It gives these fruits their characteristic sour taste.
- Acetic Acid: Found in vinegar, which is produced through the fermentation of ethanol by acetic acid bacteria.
- Ascorbic Acid (Vitamin C): Naturally occurring in fruits like strawberries, kiwi, citrus fruits, and vegetables like bell peppers. It acts as an antioxidant.
- Lactic Acid: Produced during the fermentation of lactose in dairy products like yogurt, kefir, and some types of cheese.
- Tartaric Acid: Present in grapes and certain other fruits. It's commonly found in wine, where it contributes to tartness.

24. Kalamkari painting is related to which state?

(a) Andhra Pradesh (b) Manipur
(c) West Bengal (d) Maharashtra

Ans. (a) : Here are some traditional painting styles and their affiliated states in India:

- Kalamkari Painting: Andhra Pradesh, particularly Srikalahasti and Machilipatnam, is known for Kalamkari paintings, which involve hand-painting or block printing on fabric.
- Phad Painting: Originating from Rajasthan, Phad paintings narrate epic tales like the life of Pabuji or Devnarayan.
- Bengal Patachitra: West Bengal is known for Patachitra, which includes intricate scroll paintings often depicting mythological stories.
- Madhubani Painting: Associated with Bihar, especially in the Mithila region. Madhubani paintings often depict mythological themes and daily life.

• Warli Painting: Originating from the Warli tribe in Maharashtra, these paintings are characterized by simple geometric shapes and depict scenes of rural life.

• Rajasthani Miniature Painting: Rajasthan is known for its vibrant miniature paintings that showcase intricate details and vibrant colors, often depicting royal life, mythology, and folklore.

• Pattachitra Painting: Odisha is famous for Pattachitra, a traditional cloth-based scroll painting depicting mythological stories and folklore.

• Tanjore Painting: Associated with Tamil Nadu, Tanjore paintings are known for their rich colors, gold leaf, and intricate detailing, often depicting deities.

25. Energy derived from the internal heat of the Earth is called _____ energy.

(a) Potential (b) Solar
(c) Kinetic (d) Geothermal

Ans. (d) : The internal energy of the Earth is commonly referred to as geothermal energy. This energy originates from the heat within the Earth's interior, generated by the radioactive decay of minerals and the residual heat from the planet's formation. Geothermal energy can be harnessed for various purposes, such as generating electricity and heating.

26. Who gave the slogan 'Come to Delhi'?

(a) Netaji Subash Chandra Bose
(b) Mahatma Gandhi
(c) Pandit Jawaharlal Nehru
(d) Lord Curzon

Ans. (a) : Freedom fighters – Slogans

• Subhash Chandra Bose- Dilli Chalo

• Subhash Chandra Bose-Tum mujhe khoon do, main tumhe azaadi doonga

• Jawahar Lal Nehru-Aaram Haram hai

• Bal Gangadhar Tilak-Swaraj Mera Janam Siddh Adhikar hai

• Mahatma Gandhi- Karo ya maro

• Pandit Madan Mohan Malviya-Satyamev Jayate

27. Who founded the Mohammedan Anglo-Oriental College in Aligarh?

(a) Maulana Abul Kalam Azad
(b) Syed Ahmed Khan
(c) Maulana Hasrat Mohani
(d) Dr. Zakir Hussain

Ans. (b) : The Mohammadan Anglo-Oriental College, which later became Aligarh Muslim University (AMU), was founded by Sir Syed Ahmed Khan. He established the college in 1875 with the aim of modernizing education for Muslims in India and promoting social and educational reforms. Sir Syed Ahmed Khan played a significant role in the upliftment of the Muslim community during the 19th century, and the establishment of the college was a crucial step in that direction.

28. Who was the first British Governor General of India in 1833? (Appointed by British India Company)

(a) Lord Dalhousie
(b) Lord Wellesley
(c) Lord Warren Hasting
(d) Lord William Bentinck

Ans. (d) : As per of The Charter Act of 1833 the Governor-General of Bengal was re-designated as the Governor-General of India. This made Lord William Bentinck the first Governor-General of India.

• Lord Canning was the first Viceroy of India. His tenure lasted for four years between 1858 and 1862.

• The first Governor-General of Bengal was Warren Hastings with tenure of office from 1772-1785.

29. Who is known as the father of the Panchayat constituency?

(a) Lord Morley (b) Lord Minto
(c) Lord Montague (d) Lord Chelmsford

Ans. (b) : Lord Minto (1905-1910) was known as Father of Communal Electorate in India and also known as the father of the Panchayat constituency. Balwant Rai Mehta is known as the "Father of Panchayati Raj. The Balwant Rai Mehta Committee was started in the 1950s with the purpose to design an implement a return to the Panchayati Raj system in modern India.

30. What is the name of poland's currency?

(a) Polish Kina (b) Polish Zloty
(c) Polish Dinar (d) Polish Balboa

Ans. (b) : The currency of Poland is the Polish Złoty (PLN), and its capital is Warsaw. Here are a few countries and their currencies:

- United States – US Dollar (USD)
- United Kingdom – British Pound (GBP)
- Japan – Japanese Yen (JPY)
- Australia – Australian Dollar (AUD)
- Canada – Canadian Dollar (CAD)
- Brazil – Brazilian Real (BRL)
- South Africa – South African Rand (ZAR)
- Russia – Russian Ruble (RUB)

31. How many languages have been listed in the eighth schedule of Indian constitution?

(a) 18
(b) 22
(c) 15
(d) 14

Ans. (b) : The Eighth Schedule of the Indian Constitution includes a list of 22 officially recognized languages. When the Indian Constitution was adopted on January 26, 1950, it initially listed 14 languages in the Eighth Schedule. 21st Constitutional Amendment in India took place in 1967. The 21st Amendment pertained to the inclusion of Sindhi as one of the languages in the Eighth Schedule of the Indian Constitution. The 71st Constitutional Amendment Act

of 1992 did indeed add three languages to the Eighth Schedule of the Indian Constitution. The languages added were: Konkani, Manipuri and Nepali.
The 92nd Constitutional Amendment Act of 2003 did indeed add four languages to the Eighth Schedule of the Indian Constitution. The languages added were: Bodo, Dogri, Maithili and Santhali.

32. Where is the headquarters of National Home Bank (NHB) located?
(a) Chennai (b) Mumbai
(c) Kolkata (d) New Delhi

Ans. (d) : The National Housing Bank (NHB) in India was established on July 9, 1988. It was set up as an apex financial institution for housing with the goal of promoting and regulating housing finance institutions in the country. The headquarters of the National Housing Bank (NHB) in India is located in New Delhi.

33. What is the atomic number of hydrogen?
(a) 0 (b) 1
(c) 2 (d) 3

Ans. (b) : Hydrogen has an atomic number of 1 and a standard atomic weight of approximately 1.008. In a hydrogen atom, there is no neutron in the nucleus. A hydrogen atom consists of one proton in its nucleus and one electron orbiting around the nucleus.

34. What is the mass of the Earth?
(a) 5.972×10^{27} kg
(b) 5.972×10^{24} kg
(c) 6.972×10^{24} kg
(d) 6.972×10^{27} kg

Ans. (b) : The approximate mass of Earth is about 5.97 x 10^24 kilograms. Earth is the third planet from the Sun in our solar system. It is the only known celestial body to support life .
- Earth orbits the Sun at an average distance of about 93 million miles (150 million kilometers) in an elliptical orbit.
- Earth has a diameter of approximately 12,742 kilometers (7,918 miles) and is primarily composed of rock and metal.
- The Earth's atmosphere is composed mainly of nitrogen (78%) and oxygen (21%). Traces amounts of other gases are also present.
- Earth has a significant amount of water in various forms, including oceans, lakes, rivers, and glaciers, covering about 71% of its surface.

35. _____ respiration is a process in which organisms generate energy in the absence of oxygen.
(a) Underweight (b) Autotrophic
(c) Oxy (d) Anaerobic

Ans. (d) : Anaerobic respiration is a type of respiration through which cells can break down sugars to generate energy in the absence of oxygen. This is in contrast to the highly efficient process of aerobic respiration, which relies on oxygen to produce energy.

36. What is the last formality without which no Union Bill can be made in our country?
(a) President's Signature
(b) Signature of the Speaker of Lok Sabha
(c) Prime Minister's Signature
(d) Vice President's Consent

Ans. (a) : The Bill becomes an Act only after the President has given assent to it. A bill in statute in draft and can not become law unless it has received the approval of bath the house of the Parliament and the assent of the president India.

37. What is the capital of Uttarakhand?
(a) Lucknow (b) Bhopal
(c) Agartala (d) Dehradun

Ans. (d) : Here are some states of India along with their capitals:
- Uttarakhand – Dehradun
- Maharashtra – Mumbai
- Uttar Pradesh – Lucknow
- Tamil Nadu – Chennai
- Karnataka – Bengaluru
- Andhra Pradesh – Amaravati
- Telangana – Hyderabad
- Madhya Pradesh – Bhopal
- Rajasthan – Jaipur
- Kerala – Thiruvananthapuram
- West Bengal – Kolkata

38. Kanishka was the great king of which dynasty?
(a) Barkjei (b) Asaf Jahi
(c) Kushan (d) Chalukya

Ans. (c) : King Kanishka was associated with the Kushan Dynasty. Fourth Buddhist Council, was convened by King Kanishka around the 1st century CE. The founder of the Kushan Dynasty was Kujula Kadphises. He is credited with establishing the Kushan Empire in the early 1st century CE, and his reign marked the beginning of a significant political entity in Central Asia and northern parts of the Indian subcontinent. Shaka era (Shak Samwat), is associated with the calendar system used in the Indian subcontinent. The Shaka era is believed to have started in 78 CE, marking the beginning of the Shaka era calendar.

39. What is the capital of Bhutan?
(a) Minsk (b) Vienna
(c) Kabul (d) Thimpu

Ans. (d) : Here are the capitals of some countries:
- Bhutan – Thimpu
- Austria- Vienna
- Belarus – Minsk
- Afghanistan-Kabul
- United States – Washington, D.C.
- Canada – Ottawa
- Australia – Canberra
- Germany – Berlin
- France – Paris

40. What is the full form of "EPF"?
(a) Employees Provident Fund
(b) Employees Priority Fund
(c) Employee Personal Fund
(d) Employees Provident Finance

Ans. (a) : Here are the some scheme and it's full form:
- Employees' Provident Funds Scheme 1952 (EPF)
- Employees' Pension Scheme 1995 (EPS)
- Employees' Deposit Linked Insurance Scheme 1976 (EDLI)
- Universal Account Number (UAN)

41. Who among the following was elected unopposed as the President of India?
(a) VV Giri
(b) Neelam Sanjiva Reddy
(c) Giani Jail Singh
(d) Dr. S. Radhakrishnan

Ans. (b) : There have been two Presidents of India who were elected unopposed. Dr. Rajendra Prasad in 1952 and Neelam Sanjiva Reddy in 1977 were both elected without any opposition. Neelam Sanjiva Reddy was elected on 21 July 1977 and was sworn in as the sixth President of India on 25 July 1977. Reddy worked with three governments, with Prime Ministers Morarji Desai, Charan Singh and Indira Gandhi.

42. "Portfolio System" implemented by whom?
(a) Lord Mayo
(b) Lord William Bentinck
(c) Lord Canning
(d) Lord Wellesley

Ans. (c) : Indian Council Act of 1861 gave recognition to the 'portfolio' system, introduced by Lord Canning in 1859. Under this, a member of the Viceroy's council was made in-charge of one or more departments of the Government and was authorised to issue final orders on behalf of the council on matters of his department.

43. Ghoomar is folk dance.
(a) Jharkhand (b) Uttarakhand
(c) Meghalaya (d) Rajasthan

Ans. (d) : Ghoomar is a traditional folk dance associated with the Indian state of Rajasthan. It is characterized by graceful movements, vibrant costumes, and rhythmic patterns. Here are some Indian states and their associated folk dances:
- Meghalaya- Shad Suk Mynsiem
- Jharkhand- Chhau
- Uttarakhand-Langvir Nritya
- Gujarat-Garba
- Punjab- Bhangra
- Assam-Bihu
- Maharashtra-Lavani
- Bihar- Jhijhiya

44. What is the full name of RADAR?
(a) Radio Detection and Ranging
(b) Radio Divergence and Ranging
(c) Radio Detection and Radiation
(d) Radial Distance And Ranging

Ans. (a) : RADAR stands for "Radio Detection and Ranging." It is used to detect and track aircraft, ships, spacecraft, guided missiles, motor vehicles, map weather formations, and terrain.

45. Multan Cricket Stadium is located in which of these countries?
(a) Afghanistan (b) Pakistan
(c) UAE (d) Bangladesh

Ans. (b) : The Multan Cricket Stadium is a multi-purpose stadium in Multan, Punjab, Pakistan, owned by the Pakistan Cricket Board.

46. The working hours of the members of the Rajya Sabha are:
(a) 6 years (b) 5 years
(c) 4 years (d) 2 years

Ans. (a) : Members of the Rajya Sabha, the upper house of the Indian Parliament, are elected for a term of six years. One-third of the members retire every two years, and they are replaced through elections and nominations. This system ensures continuity in the functioning of the Rajya Sabha while allowing for periodic renewal of its membership. The maximum strength of the Rajya Sabha, the upper house of the Indian Parliament, is 250 members.

47. Kidambi Srikanth is related to which sport?
(a) Badminton (b) Tennis
(c) Hockey (d) Cricket

Ans. (a) : Kidambi Srikanth is associated with badminton. He is an Indian professional badminton player who has achieved success at the international level. Srikanth has represented India in various tournaments and has won several titles, contributing significantly to the country's presence in the sport of badminton.

48. Members of the Union Public Service Commission.
(a) Appointed by the President
(b) Elected by peoples
(c) Elected by Parliament
(d) Are appointed by the Home Ministry

Ans. (a) : Article 316 of Indian Constitution states that-the Chairman and other members of a Public Service Commission shall be appointed, in the case of the Union Commission or a Joint Commission, by the President, and in the case of a State Commission, by the Governor of the State.
- A member of a Public Service Commission shall hold office for a term of six years from the date on which he enters upon his office or until he attains, in the case of the Union Commission, the age of sixty-five years, and in the case of a State Commission or a Joint Commission, the age of sixty-two years, whichever is earlier

49. Tungabhadra Dam is situated-
(a) Goa (b) Kerala
(c) Karnataka (d) Maharashtra

Ans. (c) : The Tungabhadra Dam, also known as Pampa Sagar, is a water reservoir constructed across the Tungabhadra River in the city of Hosapete in Ballari district, Karnataka, India.
Dam – State – River
- Maithon Dam -Jharkhand- Barakar

- Bisalpur Dam-Rajasthan- Banas
- Mettur Dam-Tamil Nadu- Kaveri
- Krishnarajasagar Dam-Karnataka-Kaveri
- Indira Sagar Dam-Madhya Pradesh-Narmada
- Hirakud dam-Odisha-Mahanadi
- Tehri Dam-Uttarakhand-Bhagirathi

50. Rain with Ice crystals are called .

(a) Fog (b) sleets
(c) Rain (d) Relative Humidity

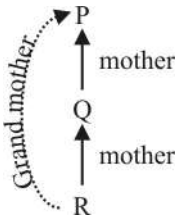
Ans. (b) : Rain with ice crystals is called sleet. Sleet (Ice Pellets) are frozen raindrops that strike the earth's surface. Select occurs when snowflakes only partially melt when they when they full trough a shallow layer of worm air .

51. Read the following logic and answer the given question.

A @ B means, A is the mother of B.
A # B means, A is the father of B.
A $ B means, A is B's brother.
A% B means, A is the sister of A, B.
Which of the following shows that P is R's grandmother?

(a) P#Q#R (b) P%Q#R
(c) P#Q@R (d) P@Q@R

Ans. (d) : According to the question, From option (d) P@Q@R



Hence, it is clear from above diagram that P is R's grandmother.

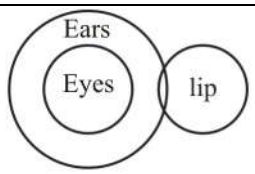
52. In this question two statements and two conclusions i and ii have been given, assuming that the facts given in the statements are true and to decide which conclusions are logical in relation to the statements?

Statement : All eyes are ears. Some ears have lips.
Conclusion :
i) Some eyes are lip.
ii) No eyes are lip.
Select correct one from the following options.

(A) Only conclusion i is logical.
(B) Only conclusion ii is logical.
(C) Either i or ii conclusion is logical.
(D) Neither i nor ii conclusion is logical.
(E) i and ii both conclusions are logical.

(a) A (b) C
(c) D (d) B

Ans. (b) : According to the question, venn diagram is as follows,



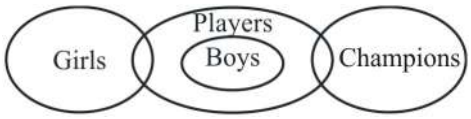
Hence, it is clear from above venn diagram that either conclusion I or II is logical.

53. In this question three statements and related four conclusions have been given, assuming that the statements given in the statements are true and to decide which conclusions are logical in relation to the statements?

Statement. Some girls are players. All boys are player. Some players are champions.
Conclusion:
i) Some boys are girls.
ii) Some boys are players.
iii) Some Champions are girls.
iv) Some champions are boys.

(a) Only (i)
(b) Only (ii)
(c) Only (i), (ii) and (iii)
(d) Only (ii), (iii) and (iv)

Ans. (b) : According to the question, venn diagram is as follows :



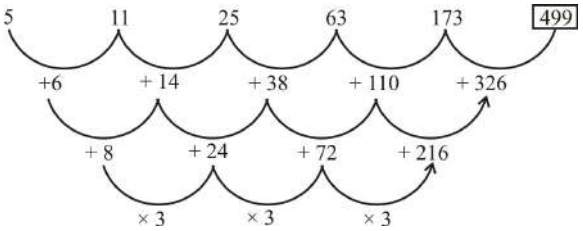
Conclusion- (i) ×
(ii) ✓
(iii) ×
(iv) ×

Hence it is clear from venn diagram that only conclusion II is logical.

54. Choose the next number in the following series.
5, 11, 25, 63, 173,?

(a) 551 (b) 596
(c) 692 (d) 499

Ans. (d) : The given series is as follows :

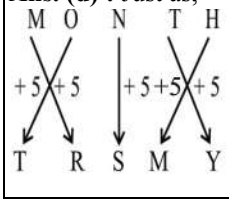


Hence ? = 499

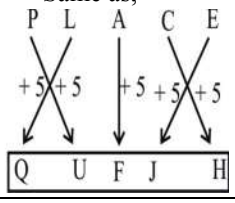
55. In a certain code language, if MONTH is written TRSMY, how would be PLACE written in the same code language?

(a) PTEIG (b) PTEGI
(c) QUFKH (d) QUFJH

Ans. (d) : Just as,



Same as,



56. Carefully read the given information and answer the given questions. Five friends Abi, Banu, Charu, Dev and Isha are sitting on the side of the north (not necessarily in this order). All five like five different types of sweets, such as laddoo, barfi, jamun, katli and peda.

i. The one who likes the peda is sitting in the middle of the line.

ii. Charu and Banu are sitting on either side of the one who likes peda.

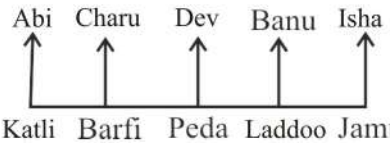
iii. Banu likes laddoo and Dev does not sit at any end.

iv. The one who likes Barfi sits third to the left of the one who likes jamun.

v. The one who likes Jamun sits at the extreme end of the line and Abi does not like Jamun. Who likes katli?

(a) Isha (b) Dev
(c) Abi (d) Charu

Ans. (c) : According to the question,

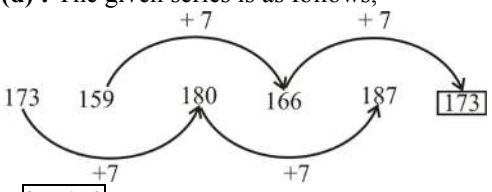


Hence, it is clear from above that Abi likes katli.

57. Select the next number in the following series.
173, 159, 180, 166, 187,?

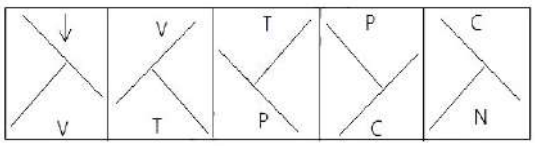
(a) 182 (b) 194
(c) 179 (d) 173

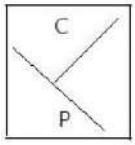
Ans. (d) : The given series is as follows,

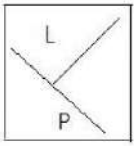


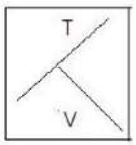
Hence ? = 173

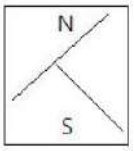
58. Select the appropriate picture to come next in the given series from the options.



(a) 

(b) 

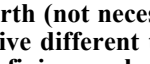
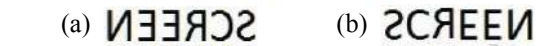
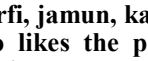
(c) 

(d) 

Ans. (d) : According to the given figure series, option (d) will complete the figure series.

59. Choose the correct water image of the given question from the given options.

SCREEN

(a) 
(b) 
(c) 
(d) 

Ans. (d) : The correct water image of the given figure is option (d).

60. Four of the following five are similar in a certain way, which creates a group. Which of these is not related to this group?
Sleep, Nap, Slumber, Doze, Alive

(a) Nap
(b) Sleep
(c) Slumber
(d) Alive

Ans. (d) : Sleep, Nap, Slumber, and Doze are synonyms of each other, Whereas, 'Alive' is different from other. Hence option (d) is correct.

61. In a certain code language, if ABUSE is written in ZYFHV, how will be INSULT written in the same code language?

(a) RMHFKG (b) SOHFLI
(c) RMHFOG (d) SOHFKI

Ans. (c) : Just as,

ABUSE $\xrightarrow[\text{LETTER}]{\text{OPPOSITE}}$ ZYFHV

Similarly,

INSULT $\xrightarrow[\text{LETTER}]{\text{OPPOSITE}}$ RMHFOG

Hence, options (c) is correct.

62. Change the question mark with the option that follows to the logic applied in the first pair.
Pathology: Diseases :: Paleontology: ??

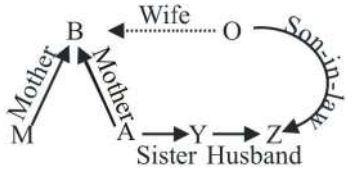
(a) Alagae (b) Insects
(c) Diet (d) Fossils

Ans. (d) : Just as, disease is investigated in pathology, same as, fossils are studied in paleontology.

63. B is the mother of M and A. Z is the son-in-law of O who is Y's husband. Y is the sister of A. How is B related to O?

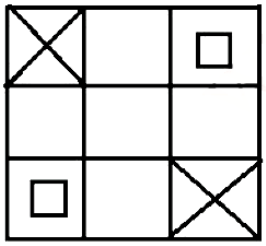
(a) Son (b) Wife
(c) Mother (d) Husband

Ans. (b) : Blood relation diagram is as follows :–



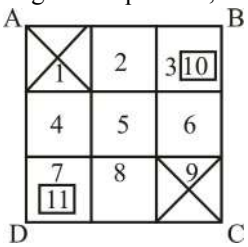
Hence, it is clear from above that B is the wife of 'O'.

64. How many squares are there in the given picture?



(a) 14 (b) 18
(c) 16 (d) 12

Ans. (c) : According to the question,



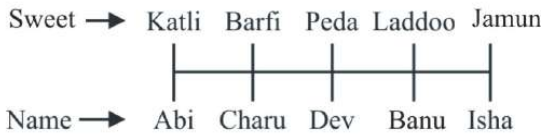
Number of square = 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, (4578), (5689), (1 2 4 5), (2 3 5 6), ABCD
Hence total number of square = 16

65. Carefully read the given information and answer the given questions. Five friends Abi, Banu, Charu, Dev and Isha are sitting on the side of the north side (not necessarily in this order). All five like five different types of sweets, such as laddoo, barfi, jamun, katli and peda.

i. The one who likes the Peda is sitting in the middle of the line.
ii. Charu and Banu are sitting on either side of the one who likes peda.
iii. Banu likes laddoo and Dev does not sit at any end.
iv. The one who likes Barfi sits third to the left of the one who likes Jamun.
v. The one who likes Jamun sits at the extreme ends of the line and Abi does not like Jamun.
Who is sitting at the right third place of Charu?

(a) Who likes Jamun.
(b) Who likes Barfi
(c) Who likes katli
(d) Who likes Laddoo

Ans. (a) : According to the question.



Hence it is clear that Isha who likes Jamun sits third to the right of Charu.

66. In this question, a statement and the two conclusions related to them are given in the form of i and ii, assuming that the statements to be true are to make sure that the conclusions regarding the statements are logical?
Statement. Weight is proportional to height.
Conclusion-

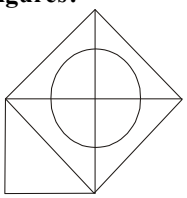
i. If the weight increases, the height remains the same.
ii. If height increases, then the weight remains the same.
Choose the right one from the following options.

(A) Only conclusion is correct.
(B) Only conclusion ii is correct.
(C) Either conclusions i or ii is correct.
(D) Neither conclusion i nor ii is correct.
(E) Both i and ii conclusion are correct

(a) A (b) B
(c) C (d) D

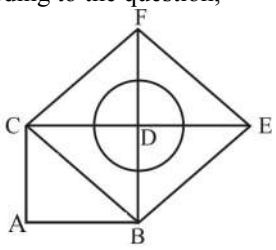
Ans. (d) : According to the given statement, weight is proportional to height, it means that if weight increases, then height also increases and vice versa. Hence conclusion (i) is wrong.
If height increases, weight remains the same. This statement is false because weight is proportional to height, which means that if weight increases, height also increases and vice versa. It is clear that neither conclusion (i) nor (ii) is correct.

67. How many right-angled triangles can be made from given figures?



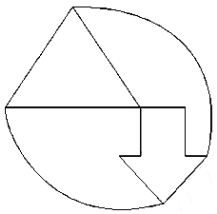
(a) 7 (b) 4
(c) 9 (d) 5

Ans. (c) : According to the question,



Number of Right angle triangle =
ΔABC, ΔBDC, ΔBDE, ΔDEF, ΔCDF, ΔCEF, ΔCBF, ΔBEF, ΔCBE
Hence total number of right angle triangle = 9

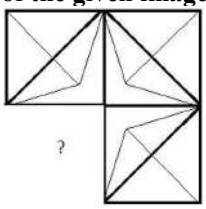
68. How many straight lines are there in the given picture?

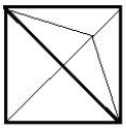
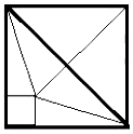


(a) 15 (b) 9
(c) 11 (d) 7

Ans. (c) : Total number of straight line in the given figure is 11.

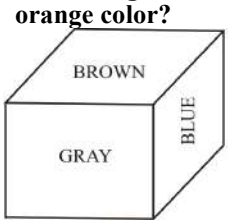
69. Select the correct option which will complete the pattern of the given image.

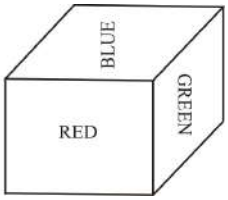


(a) 
(b) 
(c) 
(d) 

Ans. (c) : Answer figure option (c) will complete the question figure.

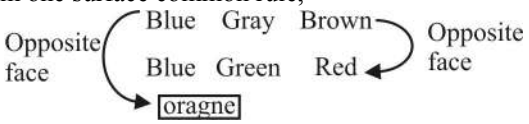
70. In the given picture, each face of the dice is painted with Red, Green, Gray, Blue, Brown and Orange. What color is painted opposite the orange color?





(a) Green (b) Blue
(c) Red (d) Gray

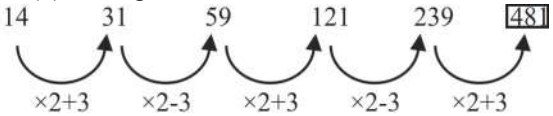
Ans. (b) : According to the question,
From one surface common rule,



Hence, Blue color is painted opposite the orange color.

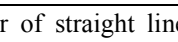
71. Select the next number in the following series.
14, 31, 59, 121, 239,?
(a) 471 (b) 478
(c) 468 (d) 481

Ans. (d) : The given series is as follows :–



Hence ? = 481

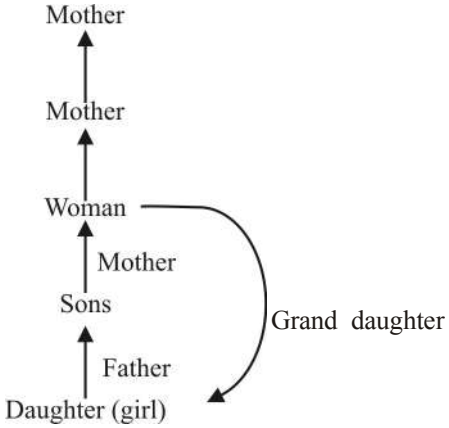
72. If a mirror is placed on the shaded line, which of the following options is the correct image of the given shape?

(a) 
(b) 
(c)
(d) 

Ans. (d) : The correct mirror image of the given figure will be option (d).

73. Pointing to a girl, a lady said, "she is my mother's only daughter's only daughter's Son's daughter. How is the girl related to the lady.
(a) Aunt
(b) Grandmother
(c) Granddaughter
(d) Daughter

Ans. (c) : According to the question, on making the blood relation diagram is as follows :



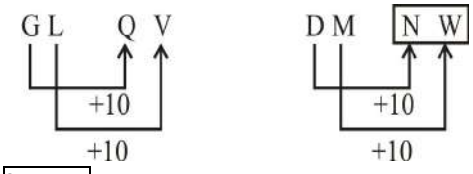
Hence, it is clear from above diagram that the girl is grand daughter of the woman.

74. In this question, three statements are given in relation between letters, three related conclusions i, ii and iii have been given. When you consider the statements as true, decide which conclusions are completely true in relation to the statements.
Statement. A ≤ M <Y; G <L> A ≥ D; D> I = N
Conclusions :
i) G > N
ii) L > N
ii) L > M
(a) All (b) Only (i)
(c) Only (ii) (d) Only (i) and (ii)

Ans. (c) : According to the question, it is clear that only conclusion ii follows.

75. Change the question mark with the option that follows to the logic applied in the first pair.
GL:QV :: DM: ??
(a) NW (b) XP
(c) VO (d) XO

Ans. (a) : Just as, Same as,



Hence ? = NW

76. Change the question mark with the option that follows to the logic applied in the first pair.
Beautician: Parlour :: Mechanic: ??
(a) Garage (b) Cockpit
(c) Laboratory (d) Cabin

Ans. (a) : Just as, Beautician is related to Parlour. Similarly, Mechanic is related to Garage.

77. Change the question mark with the option that follows to the applied logic in the first pair.
4232: 11 ::1291: ??
(a) 13 (b) 12
(c) 21 (d) 14

Ans. (a) : Just as,
$4232 : 11 \rightarrow (4 + 2 + 3 + 2) = 11$
Similarly,
$1\ 2\ 9\ 1 : ?\ ? \rightarrow (1 + 2 + 9 + 1) = ?\ ?$
$\therefore$? ? = 13

78. Four of the following five are similar in a certain way, which creates a group. Which of these is not related to this group?
P, T, H, X, R
(a) P (b) X
(c) T (d) R

Ans. (d) : According to the question,

$P \rightarrow (27-16) = 11$
$T \rightarrow (27-20) = 7$
$H \rightarrow (27-8) = 19$
$X \rightarrow (27-24) = 3$
$R \rightarrow (27-18) = 9$

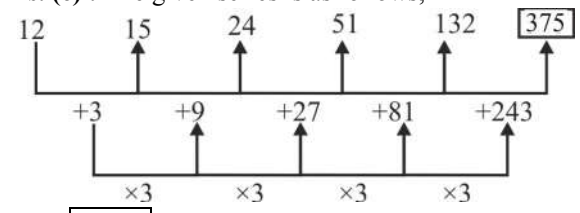
Hence, it is clear that the place value of the opposite letter of R ie. 9 is a composite number, whereas the place value of the opposite letter to the other letter is a prime number Hence, R is different from all others.

79. In this question the relationship between the letter of the statement is shown. The statement has two conclusions.
Statement : K = I <N ≤ D <E> R> A
Conclusion :
i) K < E
ii) E > A
Select the correct one from the following options.
(A) **Only i conclusion is correct.**
(B) **Only ii conclusions is correct.**
(C) **Either i or ii conclusion is correct.**
(D) **Neither i nor ii conclusion is correct.**
(E) **i and ii both conclusions are correct.**
(a) B (b) C
(c) E (d) A

Ans. (c) : According to statements
$\therefore$ $E > D \geq N > I = K$ so, $K < E$
$E > R > A$ so, $A < E$
Conclusion : (i) (✓)
(ii) (✓)
Hence, both conclusion (i) and (ii) are correct.

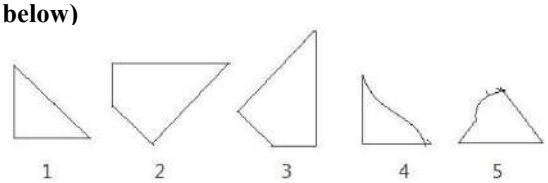
80. Select the next number in the following series.
12, 15, 24, 51, 132,?
(a) 345 (b) 294
(c) 375 (d) 268

Ans. (c) : The given series is as follows,



Hence ? = 375

81. Select the correct option from the given options that can make a full square. (3 of the 5 images below)

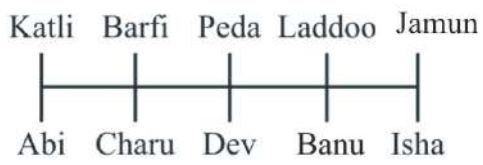


(a) 1, 4, 5 (b) 2, 3, 4
(c) 1, 2, 3 (d) 3, 4, 5

Ans. (c) : Out of the given five image 1, 2 and 3 will be formed a full square
Hence option (c) is correct.

82. Carefully read the given information and answer the given questions. Five friends Abi, Banu, Charu, Dev and Isha are sitting on the side of the north (not necessarily in the same order). All five like five different types of sweets, such as Laddo, Barfi, Jamun, Katli and Peda.
1. The one who likes the Peda is sitting in the middle of the line.
2. Charu and Banu are sitting on either side of the one who likes Peda.
3. Banu likes laddoo and Dev does not sit at any end.
4. The one who likes Barfi, sits third to left of the one who likes Jamun.
5. The one who like Jamun sits at the extreme ends of the line and Abi does not like Jamun.
According to the given statement, which of these statements is true?
(a) Abi and the one who likes Laddoo sits on the last end
(b) Dev is sitting between Abi and Charu
(c) Charu likes Barfi
(d) Isha likes Katli

Ans. (c) : According to the question.



Hence it is clear that charu likes barfi.

83. In this question, a passage and a statement related to it have been given. Read the passage carefully and review the statement based on it.
Delhi, which is one of India's capital and one of the largest cities in the world, is undergoing severe crisis, due to its high level of urbanization, increasing population and high levels of pollution. Studies have proven that are the biggest factors of pollution used for industrial and domestic use? And due to their use, people here emit large quantities of nitrogen oxides (NO_2), ozone (O_3), black carbon (BC) and microorganisms (PM). According to the 2015 Global Burden of Disease report, there were 1.09 million deaths due to PM 2.5 in India. Air pollution was included as one of the 10 biggest threats to health. According to the World Health Organization, 37 cities of India are among 100 worst polluted cities in the world, where PM10 was found to be the highest ever. For the production of ozone, together with sunlight and heat, nitrogen oxides (NO_2) and organic compounds (VOCs) are needed simultaneously.
Therefore, in the summer months, ozone is produced in large quantities in the cities.
Statement: Ozone does not arise more than a boundary on the ground in the summer months in cities.
Select the most suitable from the following options

A - Statement is absolutely true
B - Statement is probably true
C - Statement cannot be determined
D - Statement is completely false

(a) C (b) A
(c) B (d) D

Ans. (d) : According passage in the question, excessive amounts of Ozone is produced in cities during the summer season, whereas according to the statement, Ozone is not produced beyond a limit therefore the statement is complete false.

84. In this question, a passage and a statement related to it have been given. Read the passage carefully and review the statement based on it.
Delhi, which is one of India's capital and one of the largest cities in the world, is undergoing severe crisis, due to its high level of urbanization, increasing population and high levels of pollution. Studies have proven that are the biggest factors of pollution used for industrial and domestic use? And due to their use, people here emit large quantities of nitrogen oxides (NO_2), ozone (O_3), black carbon (BC) and microorganisms (PM). According to the 2015 Global Burden of Disease report, there were 1.09 million deaths due to PM 2.5 in India. Air pollution was included as one of the 10 biggest threats to health. According to the World Health Organization, 37 cities of India are among 100 worst polluted cities in the world, where PM10 was found to be the highest ever. For the production of ozone, together with sunlight and heat, nitrogen oxides (NO_2) and organic compounds (VOCs) are needed simultaneously.
Therefore, in the summer months, ozone is produced in large quantities in the cities.
Statement: Air pollution is one of the top 10 factors affecting health in India.
Select the most suitable from the following options

A - statement is absolutely true
B - statement is probably true
C - statement cannot be determined
D - statement is completely false

(a) A (b) B
(c) D (d) C

Ans. (a) : The sentence of the given statement (Air pollution is one of the top ten factors affecting health in India) are related to the question passage and give the correct explanation. Hence the statement is completely true.

85. Five to four in the following are similar in a certain way, which create a group. Which of these is not related to this group?
ZWT, NKH, ROL, PMJ, YWU

(a) ROL (b) YWU
(c) PMJ (d) ZWT

Ans. (b) : According to the question,

$Z \xrightarrow{-3} W \xrightarrow{-3} T$ $P \xrightarrow{-3} M \xrightarrow{-3} J$
$N \xrightarrow{-3} K \xrightarrow{-3} H$ $Y \xrightarrow{-2} W \xrightarrow{-2} U$
$R \xrightarrow{-3} O \xrightarrow{-3} L$

Hence it is clear that option (b) YMU is different from all others.

86. In a box, three different types of old coins are in the ratio of 7: 6: 8; the value of old coins is Rs. 1, 5 rupees and 10 rupees respectively. If the total value of coins in the box is 936, then find the number of old coins of 5 rupees.

(a) 48 (b) 52
(c) 46 (d) 50

Ans. (a) : Let,
Number of 1 rupees coins = 7x
Number of 5 rupees coins = 6x
Number of 10 rupees coins = 8x
According to the question,
$7x \times 1 + 6x \times 5 + 8x \times 10 = 936$
$117x = 936$
$x = 8$
$\therefore$ Number of old coin of 5 rupees = $6 \times 8 = 48$

87. Anil distributed 500 gifts among 4 children. The first part of the child is twice the share of the second child, three times the share of the third child and four times the fourth child's share. Find the number of total gifts received by the first and the second child.