Agniveer Army GD 18 April 2023 (Shift 1) Memory-Based Paper. (Previous Year Paper)

Army GD Agniveer • 2023 • 50 questions • 60 minutes • Answer key and solutions

Take this paper as a timed mock test

Practise under exam conditions, then review your answers after you submit.

yourmocktest.com/pyq/army-gd-agniveer/agniveer-army-gd-18-april-2023-shift-1-memory-base…

Scan the QR code or click the link to open it.

YourMockTest.com — Free Study Material

GENERAL KNOWLEDGE

Q1. What were the permanent shelters of Jain and Buddhist monks called?

(a) House
(b) Vihara
(c) Caves
(d) Sangha

Q2. Who has been appointed as governor of Jharkhand as on Feb 2023?

(a) Lakshman Prasad Acharya
(b) Anusuiya Uikye
(c) Phagu Chauhan
(d) C.P. Radhakrishnan

Q3. Which of the following countries will host the 2023 women's T-20 Cricket World Cup?

(a) India
(b) Bangladesh
(c) Australia
(d) South Africa

Q4. The Attorney General of India is the ____ of the Government of India.

(a) Chief Account Officer
(b) Chief Law Officer
(c) Chief Audii Officer
(d) Chief Election Officer

Q5. Recently, who has been appointed by the Government as Chief of Defence Staff (CDS)?

(a) Upendra Dwivedi
(b) Amardeep Singh Bhinder
(c) Manish Mohan Erry
(d) Anil Chauhan

Q6. Who is popularly known as Netaji?

(a) M. G. Ranade
(b) Mahatma Gandhi
(c) Gopala Krishna Gokhale
(d) Subhash Chandra Bose

Q7. Which of the following country was the runner up of FIFA World Cup 2022?

(a) France
(b) Croatia
(c) Portugal

(d) Morocco

Q8. With which country does India conduct “Harimau Shakti” exercise?

(a) Australia
(b) Japan
(c) USA
(d) Malaysia

Q9. The ancient Harappan city of Lothal is located in the state of _____.

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

Q10. Who was the viceroy during the start of Non-cooperation movement?

(a) Lord Dalhousie
(b) Lord Chelmsford
(c) Lord Curzon
(d) Lord Mountbatten

Q11. What is the full from of MP in Parliament?

(a) Member of President
(b) Member of Parliament
(c) None of these
(d) Member of Prime Minister

Q12. What is meant by 'Sex Ratio'?

(a) Number of females per 100 males
(b) Number of females per 1000 males
(c) Number of females per 10000 males
(d) Number of females per 100000 males

Q13. Largest inland saline water lake in India is

(a) Chilka
(b) Sambhar
(c) Lonar
(d) Wullar

Q14. Agra is situated on the bank of the river

(a) Yamuna
(b) Gangothri
(c) Gandak
(d) Chambal

Q15. Which scheme has been approved by central government for recruitment of youth in armed forces?

(a) SAMAY
(b) WARRIOR
(c) AJEY YUVA
(d) AGNIPATH

GENERAL SCIENCE

YourMockTest.com — Free Study Material

Q16. The force of attraction of the earth on an object is known as the

(a) Weight of the object
(b) Motion of the object
(c) Friction of the object
(d) Mass of the object

Q17. The male and female sex cells fuse to form a-

(a) Gastrula
(b) Zygote
(c) Gamete
(d) Blastula

Q18. The angle of incidence is the angle between -

(a) Incident ray and mirror surface
(b) Reflected ray and mirror surface
(c) Normal on the surface and incident ray
(d) Normal on the surface and reflected ray

Q19. The unripe mangoes contain _____

(a) oxalic acid
(b) lactic acid
(c) ascorbic acid
(d) tartaric acid

Q20. The pH value of milk is _____.

(a) 2.4
(b) 3.8
(c) 6.6
(d) 8.0

Q21. The waves used in common TV remote control are

(a) X-Rays
(b) Ultra-violet Rays
(c) Infrared Rays
(d) Gamma Rays

Q22. The smallest living cell is that of a?

(a) Bread mold
(b) Mycoplasma
(c) Virus
(d) Bacterium

Q23. Which of the following are Primary colours?

(a) Red, Green, Blue
(b) Red, Black, Green
(c) Yellow, Red, Green
(d) Green, Magenta, Yellow

Q24. Which Vitamin is used by the body to help blood clot?

(a) Vitamin A
(b) Vitamin D
(c) Vitamin C
(d) Vitamin K

YourMockTest.com — Free Study Material

Q25. Which part of the flower forms the seed?

(a) Ovule
(b) Stigma
(c) Style
(d) Ovary

Q26. At puberty testosterone in human beings is released by _____.

(a) Testes
(b) Pituitary Gland
(c) Adrenal Gland
(d) Ovaries

Q27. The part of the magnet from where magnetic field lines emerge is known as:

(a) north pole
(b) middle of the magnet
(c) north and south pole
(d) south pole

Q28. Chemical formula of magnesium oxide is.

(a) MgCO3
(b) MgO2
(c) MgO
(d) Mg(OH)2

Q29. Who discovered the 'Hormone Insulin' used to treat diabetes?

(a) Frederick Banting
(b) John Macleod
(c) Charles Best
(d) Christiaan Barnard

Q30. Substance which has bitter taste and doesn't change the colour of blue litmus is___

(a) Base
(b) Acid
(c) Chemicals
(d) None of the above

MATHS

Q31. 48% of 300 is?

(a) 154
(b) 60
(c) 144
(d) 150

Q32. A runner covers a distance of 300 meter in 30 sec. Find his speed in in kmph

(a) 10 km/hr
(b) 36 km/hr
(c) 2.77 km/hr
(d) 20 km/hr

Q33. The average age of 5 members in a family is 46, one family member got married due to this average age is decreased by 3. Find the age of new family member

(a) 26 year
(b) 28 year
(c) 30 year

YourMockTest.com — Free Study Material

(d) 24 year

Q34. The average weight of 8 person increases by 2.5 kg, when a new person comes in place of one of them, weighing 65 kg. What might be the weight of new person?

(a) 76 kg
(b) 76.5 kg
(c) 85 kg
(d) None of these

Q35. What will be the simple interest on a sum of Rs. 12000 at the rate of 15 percent per annum for three years ?

(a) Rs. 7200
(b) Rs. 6000
(c) Rs. 5400
(d) Rs. 4500

Q36. 60:140 = ?

(a) 0.42
(b) 0.36
(c) 0.24
(d) 0.30

Q37. Find the area of the circle whose diameter is 14 cm?

(a) 154 cm^2
(b) 174 cm2
(c) 164 cm2
(d) 144 cm2

Q38. If x + y = 6, and xy = 8 then find the value of x where x > y

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

Q39. If 273/x = 3 then find the value of x.

(a) 27
(b) 81
(c) 73
(d) 91

Q40. (45-15+12)/(3×2+1) = ?

(a) 5
(b) 6
(c) 7
(d) 8

Q41. Find the sum of $2x^3 - 3y^2$, $4x^3 - 3y^2$,$6x^3 + 3y^2$

(a) $3(4x^3 - y^2)$
(b) $3(x3 - 4y^2)$
(c) $3(4x3 + y^2)$
(d) $3(x3 + y^2)$

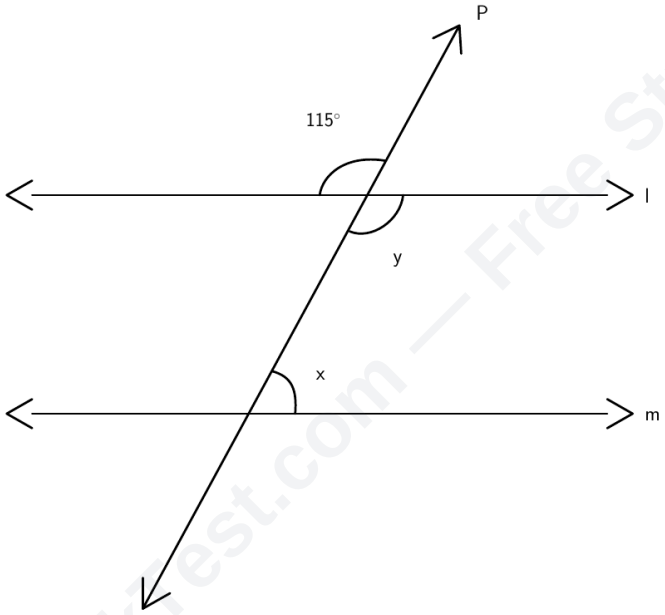
Q42. The sum of two numbers is 45 and their ratio is 7:8. Find the numbers.

(a) 22, 23
(b) 21, 24
(c) 20, 25

YourMockTest.com — Free Study Material

(d) 19, 26

Q43. In the given figure transversal line P intersect line l || m, find the complementary angle of x.



(a) 15°
(b) 25°
(c) 35°
(d) 45°

Q44. If A and B together can complete a piece of work in 20 days and B alone in 25 days, in how many days can A alone complete the work?

(a) 100 days
(b) 110 days
(c) 120 days
(d) 90 days

Q45. 0.25 + 1.37 – 0.36 = ?

(a) 1.9
(b) 1.26
(c) 2.1
(d) 1.3

LOGICAL REASONING

Q46. Choose the analogy that best matches the example given.

Bristles : Brush ::

(a) Strings : Guitar
(b) Hot : Water
(c) Rotate : Clock
(d) Color : Picture

Q47. In a certain code 'PAISE' is coded as 'QBJTF' and 'CEASE' is coded as 'DFBTF'. How will 'TRANGLE' be coded in the same code?

(a) USBOIMF
(b) USBMHMF
(c) USOBIMF
(d) USBOHMF

YourMockTest.com — Free Study Material

Q48. 9, 18, X, 72, 144, 288, then X = ?

(a) 36
(b) 32
(c) 33
(d) 34

Q49. If FOSTER = 36, DANCE = 25, then ORCHARD = ?

(a) 50
(b) 64
(c) 49
(d) 67

Q50. In a code language if 'HINDI' is coded as 'IKQHN', how will you code MATHS?

(a) NCWLX
(b) NWCLX
(c) NXCLX
(d) XLWCN

ANSWER KEY

1	b	2	d	3	d	4	b	5	d	6	d	7	a	8	d	9	a	10	b
11	b	12	b	13	b	14	a	15	d	16	a	17	b	18	c	19	d	20	c
21	c	22	b	23	a	24	d	25	a	26	a	27	a	28	c	29	a	30	a
31	c	32	b	33	b	34	c	35	c	36	a	37	a	38	b	39	d	40	b
41	a	42	b	43	b	44	a	45	b	46	a	47	d	48	a	49	c	50	a

SOLUTIONS

Q1. Answer: (b) Vihara

The correct answer is Vihara.

Key Points

• The permanent shelters of Jain and Buddhist monks are called Viharas.
• They were built out of either rock or wood.
• Large sites in India such as the Ajanta Caves, Kanheri Caves, Karli Caves, and Aurangabad Caves contain several Viharas.
• Chaityas were assembly halls for the place of worship in Buddhism.
• Sangha: It is the community of Buddhist monks or nuns or the order of monks who follow Buddhism.

Q2. Answer: (d) C.P. Radhakrishnan

The correct answer is C.P. Radhakrishnan.

In News

• President has appointed new Governors for twelve states and the Union Territory of Ladakh.

Key Points

• C. P. Radhakrishnan will be 10th Governor of Jharkhand.
• He was the member of Bharatiya Janata Party (BJP) and was elected to the Lok Sabha twice from Coimbatore.
• He was Chairman of the All India Coir Board from 2016 to 2019, which comes under the Ministry of Micro, Small and Medium Enterprises (MSME).

Additional Information

• Appointment of Governor:
• The Governor is neither directly elected by the people nor indirectly elected by a specially constituted electoral college as is the case with the President.
• He/she is appointed by the President by warrant under his hand and seal.
• As held by the Supreme Court in 1979, it is an independent constitutional office and is not under the control of or subordinate to

the Central government.

• While drafting the Constitution, the Canadian model of Governor' appointment by the Centre was accepted in the Constituent Assembly.

Important Points

• On 27th July, 2024, Santosh Gangwar appointed as the new governor.

Q3. Answer: (d) South Africa

The correct answer is South Africa.

Key Points

• The 2023 ICC Women's T20 World Cup is scheduled to be the eighth edition of the ICC Women's T20 World Cup tournament.

• It is scheduled to be held in South Africa.

• The 2023 ICC Men's Cricket World Cup will be the 13th edition of the men's Cricket World Cup, scheduled to be hosted by India during October and November 2023.

• This will be the first time the competition is held completely in India. Three previous editions were partially hosted there - 1987, 1996, and 2011.

• Chairman of ICC: Greg Barclay.

• CEO of ICC: Geoff Allardice

• Headquarters of ICC: Dubai, United Arab Emirates.

Additional Information

• About BCCI:

• The Board of Control for Cricket in India is the governing body for cricket in India and is under the jurisdiction of the Ministry of Youth Affairs and Sports, Government of India. The board was formed in December 1928 as a society, registered under the Tamil Nadu Societies Registration Act.

• President: Roger Binny.

• Secretary: Jay Shah.

• Headquarters: Mumbai.

Important Points

• Recent Updates- (June 2021)

• The ICC has inducted 10 icons of the game, including India's Vinoo Mankad, into its illustrious Hall of Fame with two players each from five eras, dating back to cricket's early days, making it to the list.

• The announcement has been coincided with the inaugural World Test Championship final, to be played between India and New Zealand from June 18 in Southampton.

• The International Cricket Council (ICC) has announced Scotland's Kathryn Bryce and Bangladesh's Mushfiqur Rahim as the winners of the ICC Player of the Month Awards for May.

• ICC Player of the Month Awards aims to recognize and celebrate the best performances from both male and female cricketers across all forms of international cricket throughout the year.

Q4. Answer: (b) Chief Law Officer

The correct answer is Chief Law Officer.

Key Points

• The Attorney General of India is the highest law officer in the country.

• The Attorney General of India is the chief legal advisor to the government and is the primary lawyer in the Supreme Court of India.

• The Attorney General's duty is to give advice to the Government of India upon such legal matters, which are referred to him by the President.

• The Attorney General of India appears before the Supreme Court and various high courts in cases involving the Government of India.

• The Attorney General of India should have the qualification to be a judge of the Supreme Court.

• The Attorney General of India is appointed by the President and holds the office during the pleasure of the President.

• The Attorney General of India is removed from his office by the President.

• The term of office of the Attorney General of India is not fixed by the Constitution.

• The Attorney General of India is not a member of the Cabinet.

• He has the right to speak in either House of the Parliament, but he has no right to vote.

Important Points

• As of Dec 2022 Attorney General of India - R Venkataramani.
• The first Attorney General of India - M. C. Setalwad.
• The longest-serving Attorney General of India - M. C. Setalwad.
• Article 76 - Provides the office of Attorney General of India.

Q5. Answer: (d) Anil Chauhan

The correct answer is 'Anil Chauhan'.

Key Points

• The Government has appointed Lieutenant General Anil Chauhan (Retired) as the next Chief of Defence Staff (CDS).
• Lieutenant General Chauhan will also function as Secretary, Department of Military Affairs with effect from the date of his assumption of charge.
• The post of Chief of Defence Staff has been lying vacant since death of General Bipin Rawat in a helicopter crash on 8th December last year.
• In a career spanning over nearly 40 years, Lieutenant General Anil Chauhan held several command, staff and instrumental appointments and had extensive experience in counter-insurgency operations in Jammu and Kashmir and North-East India.
• Lt Gen Anil Chauhan was commissioned into the 11 Gorkha Rifles of the Indian Army in 1981. He is an alumnus of the National Defence Academy, Khadakwasla and Indian Military Academy, Dehradun.
• In the rank of Major General, the officer had commanded an Infantry Division in the critical Baramula sector in the Northern Command. Later as Lt General, he commanded a corps in the North East and subsequently went to become the General Officer Commanding-in-Chief of the Eastern Command and held the charge until his retirement from the service in May 2021.
• In addition to these command appointments, Lt Gen Chauhan also tenanted important staff appointments including the charge of Director General of Military Operations.

Additional Information

• Lieutenant General Anil Chauhan had also served as a United Nations mission to Angola. Even after his retirement from the Army, he continued to contribute to national security and strategic matters.
• For his distinguished and illustrious service in the Army, Lt General Anil Chauhan (Retired) was awarded the Param Vishisht Seva Medal, Uttam Yudh Seva Medal, Ati Vishisht Seva Medal, Sena Medal and Vishisht Seva Medal.

Q6. Answer: (d) Subhash Chandra Bose

The correct answer is Subhash Chandra Bose.

Key PointsSubhash Chandra Bose (1897 - 1945)

• Subhash Chandra Bose is popularly known as 'Netaji'.
• Subhash Chandra Bose was born on 23rd January 1897, in Cuttack, Orissa Division, Bengal Province.
• The birth anniversary of Netaji on 23rd January is celebrated as 'Parakram Diwas'.
• He passed the Indian Civil Services Examination in 1920 in England but left it on Gandhiji's call of the Non-cooperation Movement.
• He was the first elected INC President at the Haripura Session in 1938 and Tripuri Session in 1939.
• He founded the Forward Bloc in 1939 and Kisan Sabha.
• The first division of INA was formed in September 1942 with the help of Japan.
• He took the charge of Indian Army (Azad Hind Fauj) in 1943 in Singapore.
• He addressed Mahatma Gandhiji as the 'Father of the Nation'.
• He was highly influenced by Vivekananda's teachings and considered him as his spiritual Guru.
• Chittaranjan Das was the "Political Guru of Subhash Chandra Bose".
• A .N. Mukherjee Commission enquired about the mysterious disappearance of Bose.
• "Give me blood, I will give freedom" is a famous word by Netaji.
• The famous slogan - Dilli Challo, Jai Hind.
• Autobiography - The Indian Struggle.

Additional InformationChittaranjan Das (1870 - 1925)

• Chittaranjan Das is popularly known as 'Deshbandhu'.
• He is the first president of the Swaraj Party (1923).
• C.R. Das served as the Indian National Congress Acting president in the Ahmedabad session (1921).
• He was actively involved in Brahmo Samaj.
• He became involved with the Non-Cooperation Movement led by Mahatma Gandhi.
• In 1908, Das attained widespread fame when he was successfully able to defend Aurobindo Ghosh in the Alipore Bomb Case.

YourMockTest.com — Free Study Material

M. G. Ranade (1842 - 1901)

• M. G. Ranade called the 'Father of the renaissance of Western India'.

• He was the mentor and political guru of Gopal Krishna Gokhale, and Bal Gangadhar Tilak.

• He established the “Widow Marriage Association” in 1861.

• Ranade founded the 'Poona Sarvajanik Sabha' in 1870, to represent the Government, the aspiration of the people.

Mahatma Gandhi 1869 -1948)

• Gandhiji is known as the Father of our Nation.

• He returned to India from South Africa on 9th January 1915 and celebrated it as Pravasi Bharatiya Divas (NRI Day).

• The first satyagraha of Gandhiji is Chamapran Satyagraha (1917) also known as the first civil disobedience movement.

• The first hunger strike of Gandhiji is Ahmedabad Mill Strike (1918).

• The first non-cooperation movement of Gandhiji is Kheda Satyagraha (1918).

• He was the president of the INC session in Belgaum (1924).

• In 1931, Gandhiji participated in the Second Round Table Conference in London.

• Gandhiji was assassinated on 30 January 1948 by Nathuram Godse and observed as 'Martyrs Day'.

Gopala Krishna Gokhale (1866 - 1915)

• He is the founder of 'Servants of Indian Society' in 1905.

• The political Guru of Gokhale was M. G. Ranade.

• He was the President of the Benarus Session of INC in 1905.

• Gandhiji regarded him as the Political Guru.

• Tilak called Gokhale the 'Diamond of India'.

Q7. Answer: (a) France

The correct answer is France.

Key Points

• Argentina defeated France 4-2 on penalties to win their third World Cup, after 36 years on 18 December 2022.

• Golden Ball was awarded to Lionel Messi.

• He also got this award in 2014.

• With eight goals, Kylian Mbappe was awarded the Golden boot.

• Enzo Fernandez is awarded the Young Player of the Tournament award.

• While the goalkeeper of the tournament was given to Emiliano Martinez.

Additional Information

• Other Sports News:

• Indian swimmer Chahat Arora set a national record in the women's 100-metre breaststroke at the FINA World Swimming Championships 2022 in Melbourne, Australia on 14 Dec 2022.

• Men's badminton world number one Viktor Axelsen won the men's singles title after defeating Indonesian ace Anthony Ginting at the season-ending World Tour Finals in Bangkok on 11 December 2022.

• Indian swimmer Siva Sridhar broke the national record in the men’s 200m individual medley heats at the Short Course World Championships in Melbourne on 13 Dec 2022.

• Manu Bhaker bagged a gold medal in the 10-metre pistol junior women's event at the National Shooting Championship in Bhopal.

Q8. Answer: (d) Malaysia

The correct answer is Malaysia.

Key Points

• India - Malaysia joint military Exercise “Harimau Shakti -2022” commenced at Pulai, Kluang, Malaysia on 28th November.

• It culminated on 12th December 2022.

• Exercise HARIMAU SHAKTI is an annual training event between the Indian and Malaysian Army which is being conducted since 2012.

• The scope of this exercise involves a Command Planning Exercise (CPX) at the Battalion level.

Important Points

• Combat-experienced troops of the Garhwal Rifles Regiment of the Indian Army and the Royal Malay Regiment of the Malaysian Army are participating in the exercise this year.

• The joint exercise schedule includes the establishment of a joint command post, joint surveillance centre, sharing expertise in the

employment of aerial assets, technical demonstrations, etc.

• Some Military Exercises of India:

Country	Military Exercise
USA	Yudh Abhyas, Vajra Prahar
Bangladesh	Sampriti
France	Shakti Exercise, Garuda
Indonesia	Garuda Shakti

Q9. Answer: (a) Gujarat

The correct answer Gujarat

Key Points

• The ancient Harappan city of Lothal is located in the state of Gujarat

• Lothal is a coastal site in the state of Gujarat and was an important trading centre during the Harappan period.

• The artificial dockyard (the most striking feature) in Lothal signifies its importance as a trading centre.

• The site was discovered by SR Rao in 1964.

• Lothal is a lower town and dockyard.

• Evidence of rice has been found from Lothal.

• Lothal is also known as Manchester of the Indus Valley civilization.

• The Archeological Survey of India (ASI) excavated it from 13 February 1955 to 19 May 1960.

• It is situated on the banks of Bhogava river, a tributary of the Sabarmati River.

• It is the only site belonging to Harappan culture where evidence of rice has been found.

• From here a doubtful terracotta figurine representing a horse has been found.

• The terracotta ship, Ship on a seal, double burial (male and female) chess-like game, and instruments for measuring angles are found here.

Important Points

• Babarkot, Bet Dwarka, Desalpur, Lothal, Desalpur, Dholavira, Rangpur, Rojdi, Shikarpur is present in Gujarat.

• Bhansali is situated in Fatehabad of Haryana

• Harappa is situated in the Sahiwal district of Pakistan

• Kalibangan and Baror is situated in Rajasthan

• Ropar and Sanghol is situated in Punjab

• Alamgirpur, Sothi, Sanauli, and Mandi is situated in Uttar Pradesh

Q10. Answer: (b) Lord Chelmsford

The correct answer is Lord Chelmsford.

Key Points

• Gandhiji launched the Non-cooperation Movement in 1920.

• Lord Chelmsford served as the viceroy of India from 1916 to 1921.

• The viceroy during the Third Anglo-Afghan War.

• Banaras Hindu University was started during his tenure.

Features of the movement:

• It was a peaceful and non-violent protest against the British government in India.

• The Non-cooperation movement was a mass movement that involved participation from the nationalists as well as the public.

• The movement was to be nonviolent and to consist of Indians resigning their titles, boycotting government educational institutions, government service, foreign goods, and elections, and eventually, refusing to pay taxes.

• People resigned from their government jobs.

• People were asked to withdraw their children from government-controlled or aided schools and colleges.

• This movement was a great success as it got massive encouragement from millions of Indians. This movement almost shook the British authorities.

Causes of the movement:

• Indians thought that in return for the extensive support of manpower and resources they had provided to Britain during the First World War, they would be rewarded by autonomy at the end of the war. But the Government of India Act 1919 was dissatisfactory.

YourMockTest.com — Free Study Material

• The repressive Rowlatt Act and the brutal massacre at Jallianwala Bagh, Amritsar had a profound effect on the Indian leaders and the people.

• The leaders of the Khilafat movement accepted the non-cooperation movement of Gandhiji and led a joint protest against the British.

• The Non-cooperation Movement was called off by Mahatma Gandhi after the Chauri Chaura incident in February 1922.

• In Chauri Chaura, Uttar Pradesh, a violent mob set fire to a police station killing 22 policemen during a clash between the police and protesters of the movement.

Additional Information

Lord Curzon	**• Served as the viceroy of India from 1899 to 1905. - Indian university act 1904 was passed during his reign. - The viceroy who partitioned Bengal in 1905. - The Ancient Monuments Preservation Act, 1904 was passed during his tenure.**
Lord Mountbatten	• Served as the viceroy of India from 1947 to 1948. - Last Viceroy of British India. - Indian Independence act was prepared under his leadership. - Partition of India was decided by Mountbatten plan.
Lord Dalhousie	• Served as Governor-General of India from 1848 to 1856. - He introduced railways to India. - The British Governor-General who is known as the maker of modern India. - Founder of the Public Works Department in India.

Q11. Answer: (b) Member of Parliament

The correct answer is Member of Parliament.

Key Points

• A member who elected by the people of a particular constituency and represents those people in the parliament is called a Member of Parliament (MP).

• A Member of Parliament can be from any of the two houses of the Indian Parliament namely Lok Sabha or Rajya Sabha.

• Parliament is constituted under Article 79 of the Indian constitution.

• The parliament consists of Lok Sabha, Rajya Sabha, and the President of India.

• Rajya Sabha is constituted under Article 80 of the Indian constitution.

• The Rajya Sabha is also called the house of elders.

• The maximum strength of the Rajya Sabha is fixed to 250 members.

• Among the 250 members, 238 members represent the States and Union Territories, and 12 members are nominated by the President.

• Rajya Sabha is a permanent body not subjected to dissolution.

• Lok Sabha is constituted under Article 81 of the Indian constitution.

• The Lok Sabha is also called the House of the People.

• The maximum strength of the Lok Sabha is fixed to 552 members.

• Among the 552 members, 530 members represent the States, 20 members represent Union Territories, and 2 members are nominated by the President.

• At present, there are 545 members in Lok Sabha.

• A member of parliament can be disqualified under the following conditions

1. If he holds the office of profit under the Government of India

2. If disqualified by any law.

3. If he is an undischarged insolvent.

4. If he has ceased to be a citizen of India.

5. If he disqualified on the ground of defection.

Q12. Answer: (b) Number of females per 1000 males

The correct answer is Number of females per 1000 males.

Key Points

• Sex ratio means the number of females per 1000 males. This ratio gives the number of females in 1000 males.

• This ratio is 1:1. Deviations in this trend have been observed very frequently. This is given by an age-related pattern—higher at a very young age, narrowing with increasing age, and dropping below 100 by middle age.

• The "sex ratio" is an important indicator of the gender balance in a population.

YourMockTest.com — Free Study Material

• In the 2011 Population Census, it was revealed that the population ratio in India is 940 females per 1000 males.

Additional Information

• The "sex ratio" varies from one population to another. It is better to consider separate sex ratios of different races or by ethnicity.

• This information regarding the "sex ratio" is an important social indicator to measure the extent of equality between males and females in a society at a given time.

• The sex ratio in the country with regard to females has always remained unfavorable.

• Female foeticide is still very prevalent and this is a matter of concern.

• Although many states have a sex ratio of less than one some states like Kerala have a sex ratio of 1058 females every 1000 males, Whereas Delhi has a sex ratio of 821 females for every 1000 males. Thus, it shows the grim scenario regarding female foeticide in India.

Q13. Answer: (b) Sambhar

The correct answer is Sambhar.

Important Points

• The Sambhar Salt Lake is the largest inland salt lake in India.

Key Points

• Largest saline water lake in India is Sambhar.

• The lake touches three districts of Rajasthan i.e. Jaipur, Ajmer, and Nagaur.

• The lake is surrounded on all sides by the Aravali hills.

• Sambhar Lake has been designated as a Ramsar site in 1990 because the wetland is a key wintering area for tens of thousands of flamingos and other birds that migrate from northern Asia.

• The specialized algae and bacteria growing in the lake provide striking watercolours and support the lake ecology that, in turn, sustains the migrating waterfowl.

• This inland lake receives water from five rivers, namely Samaod, Khari, Mantha, Khandela, Medtha, and Roopangar.

Additional Information

• Chilka Lake is the largest lagoon lake in India.

• It is situated in the state of Orissa covering over 1,165 sq km across Puri, Ganjam, and Khurda districts.

• This lake is also the second-largest brackish water lagoon in the world after the New Caledonian Barrier Reef which is located in South Pacific.

• Lonar Lake is a natural saltwater lake formed by asteroidal collision.

• It is located in the Lonar area of the Buldhana district of Maharastra.

• Wullar Lake is the largest freshwater lake in India.

• It is sited in Bandipora district in Jammu and Kashmir, India.

• The lake basin was formed as a result of tectonic activity and is fed by the Jhelum River.

• Wullar Lake is one of the largest freshwater lakes in Asia.

Q14. Answer: (a) Yamuna

The correct answer is Yamuna.

Key Points

• The Agra city is situated on the bank of River Yamuna.

• Agra is known for Mughal Architecture Taj Mahal which was built in 1653 by Shah Jahan.

• It is one of the seven wonders of the world and is appraised to be the most popular tourist attraction in the country.

• It is also in the list of UNESCO World Heritage Site.

Additional Information

City	on bank of River
Ahmedabad	Sabarmati
Kolkata	Hoogly
Patna	Ganges
Hyderabad	Musi
Lucknow	Gomti
Agra	Yamuna

Delhi	Yamuna
Tiruchirapalli	Kaveri

Q15. Answer: (d) AGNIPATH

The correct answer is AGNIPATH.

Key Points

• The Centre has cleared the AGNIPATH Scheme for recruitment of youth in the armed forces.

• The youth selected under this scheme will be known as Agniveers.

• They will be getting an attractive monthly package with risk and hardship allowances as applicable in the three services.

• They will be also paid a one-time Seva Nidhi Package upon completion of engagement period of four years.

Important Points

• 'Agniveers'will form a distinct rank in the three services, and will also wear a distinct insignia as part of their uniform.

• The 'Agnipath' model envisages the recruitment of personnel below officer rank (PBOR) in the army, air force and navy for four years, including six months of training.

• The soldiers recruited under 'Agnipath' will be released from service after four years, though the new system will have a provision for retaining around 25% of them after another round of screening.

Q16. Answer: (a) Weight of the object

Explanation:-

Gravitation:- It is defined as the force of attraction between two free objects towards each other.

Law of Gravitation:- If two objects in motion have masses m1 and m2 and the distance of separation between them is r, then

The force between them is F, which will be directly proportional to the product of their masses and inversely to the square of the distance between them.

F prop. to $m1m2/(r^2)$ => $F = GMm/(r^2)$

where G is a gravitational constant having a value equal to 6.67 x 10^(-11) m^3 Kg^(-1) S^(-2).

Weight:- The mass of any object under the influence of gravity is called weight.

W = m x g, where m = mass of the object and g = acceleration due to gravity.

Additional Information

• The motion of the object: - It is the movement or change in position of any object under the influence of any external force.

• The friction of the object:- It is the force that acts on the surface due to the movement of any object.

• Mass of the object:- Mass is the amount of matter contained by an object.

Q17. Answer: (b) Zygote

Option 2 is correct, i.e. Zygote.

• A zygote is formed by the fusion of male gamete (sperm) and female gamete (ovum) in the process of fertilization.

• Sperm and ovum represent the male and female gamete respectively.

• The gamete formation is a major step in the sexual reproduction which requires a fusion of gametes to form the new individual.

• So, the gametes have half the number of chromosomes such that upon fertilization the number is restored in the zygote.

• It involves two parents, essentially a male and a female parent.

Extra facts:

• Gastrula: An embryo at the stage following the blastula, when it is a hollow cup-shaped structure having three layers of cells.

• Blastula: An animal embryo at the early stage of development when it is a hollow ball of cells.

• Gamete: A mature haploid male or female germ cell which is able to unite with another of the opposite sex in sexual reproduction to form a zygote.

Q18. Answer: (c) Normal on the surface and incident ray

The correct answer is Normal on the surface and incident ray.

• The angle of incidence is the angle between the incident ray and the normal ray.

• The normal line divides the angle between the incident ray and the reflected ray into two equal angles.

• The angle between the incident ray and the normal is known as the Angle of Incidence.

• The angle of incidence and the angle of reflection is always equal and they are both on the same plane along with the normal.

Additional Information

• Reflection:

• The phenomenon in which a ray of light is sent back to the same medium from which it is coming, interacting with the boundary is called reflection.

• Law of Reflection: It states that the angle of incidence for a ray of light reflected from a plane polished surface will be equal to the angle of reflection.

Q19. Answer: (d) tartaric acid

The correct answer is tartaric acid.

Explanation:

Acids

• Acids are substances that taste sour.

• It turns litmus paper red.

• Acids are naturally present in citrus fruits like oranges, grapes, etc.

• It is also present in the ant's sting which causes irritation.

• Some naturally occurring acids and their source are listed in the below table.

Substance	Acid
Lemon \ Orange	Citric Acid
Ant String	Formic Acid
Vinegar	Acetic Acid
Curd	Lactic Acid
Grapes, Unrippen Mangoes	Tartaric acid
Amla (Vitamin C)	Ascorbic Acid
Spinach	Oxalic Acid

• From, the above chart, we can see that tartaric acid is present in unripped mangoes.

• So, the correct option is Tartaric acid.

Additional Information

Bases

• Bases are the substance that is soapy in feel and bitter in the taste.

• It turns red litmus paper into blue.

• Baking soda, neem, clove etc are examples of bases.

Q20. Answer: (c) 6.6

The correct answer is 6.6.

Key Points

• The pH value of milk is 6.5-6.7. Milk is acidic in nature.

• The pH value of milk changes over a period of time. As milk goes sour, it becomes more acidic and the PH value gets lower.

• If the cow has inflammation of a breast (mastitis), the pH of the milk would be higher.

• Evaporated or condensed milk is slightly more acidic than regular milk.

Q21. Answer: (c) Infrared Rays

The correct answer is Infrared Rays.

Key Points

• The waves used in common TV remote control are Infrared Rays.

• Infrared (IR), sometimes called infrared light, is electromagnetic radiation (EMR) with wavelengths longer than those of visible light.

• It is therefore invisible to the human eye.

• IR is generally understood to encompass wavelengths from the nominal red edge of the visible spectrum around 700 nanometers (frequency 430 THz) to 1 millimetre (300 GHz) (although the longer IR wavelengths are often designated rather as terahertz radiation).

• Black-body radiation from objects near room temperature is almost all at infrared wavelengths.

• As a form of electromagnetic radiation, IR propagates energy and momentum, with properties corresponding to both those of a wave and of a particle, the photon.

YourMockTest.com — Free Study Material

Additional Information

• An X-ray, or X-radiation, is a penetrating form of high-energy electromagnetic radiation. Most X-rays have a wavelength ranging from 10 picometers to 10 nanometers, corresponding to frequencies in the range 30 petahertz to 30 exahertz and energies in the range 124 eV to 124 keV.

• Ultraviolet (UV) is a form of electromagnetic radiation with a wavelength from 10 (with a corresponding frequency around 30 PHz) to 400 nm (750 THz), shorter than that of visible light, but longer than X-rays. UV radiation is present in sunlight and constitutes about 10% of the total electromagnetic radiation output from the Sun. It is also produced by electric arcs and specialized lights, such as mercury-vapour lamps, tanning lamps, and black lights.

• A Gamma-ray, or gamma radiation, is a penetrating form of electromagnetic radiation arising from the radioactive decay of atomic nuclei. It consists of the shortest wavelength electromagnetic waves and so imparts the highest photon energy.

Q22. Answer: (b) Mycoplasma

The correct answer is Mycoplasma.

The smallest living cell is that of Mycoplasma.

Key Points

• The members of Kingdom monera include the smallest living cells.

• Mycoplasma is known as the smallest living cell but it does not have a cell wall.

• These are the unicellular organisms that can survive without oxygen.

Additional Information

• The smallest living organism with a cell wall belongs to Bacteria.

• The size of the cell ranges from 0.5 micrometers to 100 micrometers.

• Mycoplasma gallicepticum, a parasitic bacterium is thought to be the smallest known organism with a size from 0.2 to 0.3 micrometer, capable of independent growth and reproduction.

• In the human body, the nerve cell is the longest cell.

• Nerve cells are also called neurons that are found in the nervous system.

• They can be up to 3 feet long.

Q23. Answer: (a) Red, Green, Blue

The correct answer is Red, Green, Blue.

Key Points

• As per the additive colour theory, there are three primary colour bands of wavelengths of light called Red, Blue, and Green.

• When equal parts of each of the three bands are combined together, the white light is generated.

• All three colours eventually will result in the generation of white light, and the absence of all three will produce black.

• When two primary colours of an additive theory are added together, you get secondary colours that are brighter than either of its components. These are the “additive” combinations-

1. Red + Green = Yellow (Yellow is brighter than red and green)

2. Red + Blue = Magenta (Magenta is brighter than red and blue)

3. Blue + Green = Cyan (Cyan is brighter than blue and green)

Hence, we can say that Red, Green, Blue are Primary colours.

Q24. Answer: (d) Vitamin K

The correct answer is Vitamin K.

• Vitamin K is used by the body to help blood clot.

• Warfarin is used to slow blood clotting.

Vitamins	Chemical name	Deficiency Disease
Vitamin A	Retinol	Night Blindness
Vitamin B1	Thymine	Beriberi
Vitamin B3	Niacin	Whitening of skin, Pellagra, mentally retardedness
Vitamin B5	Pantothenic	Cracking of skin
Vitamin B6	Pyridoxine	Anemia, skin disease
Vitamin B7	Biotin	Paralysis, Body pain, hair falling

Vitamin B9	Folic Acid	Anemia, dysentery
Vitamin B12	Cyanocobalamin	Jaundice, Anemia
Vitamin C	Ascorbic Acid	Scurvy, Swelling of Gum
Vitamin D	Calciferol	Rickets
Vitamin E	Tocopherol	Less fertility
Vitamin K	Phylloquinone	Non-Clotting of blood

Q25. Answer: (a) Ovule

The correct answer is ovule.

Concept:

Flower:

• A flower can be defined as a specialized structure that bears reproductive organs and takes part in the process of reproduction.

• It is involved in the formation of fruits and seeds.

Explanation:

Structure of flower:

• Each flower is supported by a stalk called a pedicle.

• This stalk leads to a broad basal region of the flower. This part is called the thalamus. Also called the receptacle.

• A typical flower has four main parts—or whorls—known as the calyx, corolla, androecium, and gynoecium.

Calyx:

• The outermost whorl of the flower has green, leafy structures known as sepals.

• The sepals, collectively called the calyx, help to protect the unopened bud.

Corolla

• The second whorl is comprised of petals usually, brightly colored collectively called the corolla.

• They help in pollination by attracting insects.

Androecium

• The third whorl contains the male reproductive structures and is known as the androecium.

• The androecium has stamens. Each stamen has an anther and a filament.

Gynoecium

• The innermost group of structures in the flower is the gynoecium or the female reproductive part.

• The carpel is the individual unit of the gynoecium and has a stigma, style, and ovary.

• Inside the ovary, there are ovules.

The ovule develops into a seed and the ovary develops into fruit after fertilization.

Q26. Answer: (a) Testes

The correct answer is Testes.

Key Points

• Testosterone is the only male sex hormone present in the human body, which causes physical changes in puberty, increases bone density and muscle mass, growth of facial, pubic, and body hair, deepening of the voice, and also responsible for sexual and reproductive development.

• Testosterone is the main sex hormone in men, which is naturally produced in the testes and in small amounts by the adrenal glands.

• Testosterone belongs to a class of male hormones called androgens, which are also known as steroids.

• The production of male sex hormones is mainly controlled by the hypothalamus and pituitary gland.

• The testosterone levels gradually decrease with age, which results in impotence, shrinking of testes, low sperm count, depression, mood swings, irritability, etc.

Additional Information

• The pituitary gland is a small pea-sized gland that plays a major role in regulating vital body functions and general wellbeing.

• It is referred to as the body's 'master gland' because it controls the activity of most other hormone-secreting glands.

• The pituitary gland is a small gland that sits in the sella turcica, a bony hollow in the base of the skull, underneath the brain and behind the bridge of the nose.

• Adrenal glands, also known as suprarenal glands, are small, triangular-shaped glands located on top of both kidneys.

YourMockTest.com — Free Study Material

• Adrenal glands produce hormones that help regulate your metabolism, immune system, blood pressure, response to stress and other essential functions.

• The ovary is an organ found in the female reproductive system that produces an ovum.

• When released, this travels down the fallopian tube into the uterus, where it may become fertilized by a sperm.

• There is an ovary found on each side of the body.

Q27. Answer: (a) north pole

The correct answer is north pole.

Key Points

• Magnetic field lines

• By drawing imaginary lines around a magnet or a magnetized object, one can see a magnetic field. Lines of force or magnetic field lines are the names given to these lines.

• Because it is a vector quantity, the magnetic field will have magnitude as well as direction, as shown in the image below. The number of lines perpendicular to the lines that cross a unit area indicates the strength of the magnetic field.

• The direction of the magnetic field can be determined by drawing a line tangentially at any point along the field lines (refer to the red arrows in the image). Electric field lines are similar to magnetic field lines.

Additional Information

• Magnet

• A material or object that generates a magnetic field is called a magnet. Despite being invisible, this magnetic field is responsible for a magnet's most notable property: a force that pulls on iron, steel, nickel, cobalt, and other ferromagnetic materials. and either draws or repels additional magnets.

• An object made of a material that has been magnetized and generates its own persistent magnetic field is known as a permanent magnet. A refrigerator magnet used to hang notes on the door of a refrigerator is an everyday example.

• Ferromagnetic (or ferrimagnetic) materials are those that can be magnetized and are also strongly attracted to a magnet.

-

Q28. Answer: (c) MgO

The correct answer is MgO.

Key Points

• Magnesium oxide also called magnesia, is an alkaline earth metal oxide.

• It is typically produced by calcining certain minerals that are found in nature.

• It is solid and can withstand high temperatures both physically and chemically.

• Magnesium oxide is composed of the ions Mg^{2+} and O^{2-}, which are joined together by an ionic bond.

• MgO is used as the magnesium oxide chemical formula.

• Magnesium is a metal and metals react with oxygen to form metallic oxides.

Additional Information

Compound	Chemical Formula
$MgCO_3$	Magnesium carbonate
MgO_2	Magnesium dioxide
$Mg(OH)_2$	Magnesium Hydroxide

Q29. Answer: (a) Frederick Banting

The Correct Answer is Frederick Banting.

Key Points

• Frederick Grant Banting was born on November 14, 1891, at Alliston, Ont., Canada.

• He was the youngest of five children of William Thompson Banting and Margaret Grant.

• Educated at the Public and High Schools at Alliston, he later went to the University of Toronto to study divinity, but soon transferred to the study of medicine.

• John James Rickard Macleod was a Scottish biochemist and physiologist. He devoted his career to diverse topics in physiology and biochemistry, but was chiefly interested in carbohydrate metabolism.

• Charles Herbert Best was an American-Canadian medical scientist and one of the co-discoverers of Insulin.

• Christiaan Neethling Barnard was a South African cardiac surgeon who performed the world's first human-to-human heart transplant operation.

Additional Information

• Insulin is a peptide hormone produced by the beta cells of pancreatic islets, which is considered to be the main anabolic hormone of the body. It regulates the metabolism of carbohydrates, fats and proteins by promoting the absorption of glucose in the blood into liver, fat and skeletal muscle cells.

• The human insulin protein is composed of 51 amino acids, and has a molecular mass of 5808 Da. It is a heterodimer of an A-chain and a B-chain, which are linked together by disulfide bonds.

Q30. Answer: (a) Base

The correct answer is option 1 i.e. Base.

Key Points

Base	**• It has a bitter taste and gives OH ions in solution according to the Arrhenius concept. - It does not change the colour of the blue litmus.**
Acid	• It has a sour taste and gives H^+ ions in solution according to the Arrhenius concept. - It turns blue litmus red.
Chemical	• The chemical compound can be acid base or salt.

Q31. Answer: (c) 144

Calculation:

48% of 300

=> (48/100) × 300

=> 48 × (300/100)

=> 48 × 3 = 144

Therefore 48% of 300 = 144.

Q32. Answer: (b) 36 km/hr

Given:

Distance covered by runner = 300 meter

Time is taken by runner = 30 sec

Formula used:

Speed = Distance/time

1 m/s = 3.6 km/h

Calculation:

By using the above formula

Speed = 300/30

Speed = 10 m/s

Speed = 10 × (3.6) kmph (Because 1 m/s = 3.6 km/h)

Therefore Speed = 36 kmph

Q33. Answer: (b) 28 year

Given

The average age of 5 members is 46

One new member is joined in the family due to this average age is decreased by 3

Formula used

Average = total sum of observations/number of observations

Calculation

Average age of 5 members is 46

=> Sum of age of family members = 46 × 5 = 230

According to question

=> After joining new member now total members is 6

=> Sum of age of 6 family member = 6 × 43

=> 258

Therefore The age of new family member (258 - 230) = 28 year.

YourMockTest.com — Free Study Material

Q34. Answer: (c) 85 kg

Given:

The average weight of 8 person increases by 2.5 kg when a person includes

The weight of the Replaced person is 65 kg

Formula used:

Average = Sum of observation/Total Number of observation

Calculation:

Let the average of 8 people be x kg

And the weight of the new person be y kg

Sum of 8 people weight is

=> 8 × x = 8x kg

When the person is replaced.

=> 8x + y - 65 = 8 × (x + 2.5)

=> 8x + y - 65 = 8x + 20

=> y = 65 + 20 = 85 kg

Therefore The weight of the new person is 85 kg.

=> 2.5 × 8 = 20 kg

Weight of the new person

=> 65 + 20 = 85 kg.

Therefore The weight of the new person is 85 kg.

Q35. Answer: (c) Rs. 5400

Shortcut Trick

Total interest percentage for 3 years = Rate × Time = 15% × 3 = 45%.

Simple Interest = 45% of Rs. 12,000.

SI = (45 ÷ 100) × 12,000 = 45 × 120 = Rs. 5400.

Therefore The correct answer is Rs. 5400.

Alternate Method

Given: Principal (P) = Rs. 12,000, Rate (R) = 15%, Time (T) = 3 years.

Formula: Simple Interest (SI) = (P × R × T) ÷ 100.

=> SI = (12000 × 15 × 3) ÷ 100

=> SI = 120 × 15 × 3

=> SI = 1800 × 3

=> SI = Rs. 5400

Therefore The correct answer is Rs. 5400.

Additional Information

Total Amount Formula

The total amount (A) at the end of the period is calculated as A = Principal + Simple Interest = P + (P × R × T / 100).

Relationship between SI and Rate

Simple Interest is directly proportional to Principal, Rate, and Time. If any of these double, the interest also doubles (keeping others constant).

SI vs CI for Year 1

For the first year (when compounded annually), Simple Interest and Compound Interest are always equal.

Q36. Answer: (a) 0.42

Calculation:

We have 60:140

This can be written as 60/140

Simplyfing the above fraction

=> (2 × 3 × 10)/(2 × 7 × 10)

=> 3/7 = 0.42

Therefore 60 : 40 = 0.42

YourMockTest.com — Free Study Material

Q37. Answer: (a) 154 cm²

Given:

Diameter = 14 cm

Formula used:

Radius = Diameter/2

Area of circle = πr²

Calculation:

Radius of circle = 14/2 cm

=> 7 cm

Area of circle = (22/7) × 7 × 7

=> 154 cm²

Therefore The area of circle is 154 cm²

Q38. Answer: (b) 4

Formula used:

(a - b)² = (a +b)² - 4ab

Calculation:

x + y = 6 -------(1)

xy = 8 ------(2)

We know that

(a - b)2 = (a +b)2 - 4ab

=> (x - y)² = (x + y)2 - 4xy

From equation (1) & (2)

=> (x - y)2 = 6² - 4 × 8

=> (x - y)2 = 36 - 32 = 4

=> (x - y) = 2 -----(3)

Adding equations (1) & (3)

2x = 8 or x = 4

From equation (1)

=> 4 + y = 6

=> y = 2

So we have x = 4 & y = 2 (Because x > y)

Therefore The value of x is 4.

Q39. Answer: (d) 91

Calculation:

Given that

273/x = 3

=> x = 273/3

=> x = 91

Therefore The value of x is 91.

Q40. Answer: (b) 6

Calculation:

(45-15+12)/(3×2+1) = ?

=> (30+12)/(6+1) = ?

=> 42/7 = ?

=> ? = 6

Q41. Answer: (a) 3(4x³ - y²)

Calculation:

We have 2x3 - 3y2, 4x3 - 3y2, 6x3 + 3y2

Adding all the given terms

YourMockTest.com — Free Study Material

=> 2x3 - 3y2 + 4x3 - 3y2 + 6x3 + 3y2

=> 2x3 + 4x³ + 6x³ - 3y2 - 3y2 + 3y²

=> 12x³ - 3y²

=> 3(4x³ - y²)

Q42. Answer: (b) 21, 24

Calculation:

Given that, the ratio of two numbers is 7 : 8

Let the numbers be 7x & 8x

According to the question

=> 7x + 8x = 45

=> 15x = 45

=> x = 3

Therefore,

7x = 21 & 8x = 24

Therefore The required numbers are 21 & 24.

Q43. Answer: (b) 25°

Concept:

complementary angle: Two angles or arcs whose sum is 90°.

A transversal intersects two lines, the two lines are parallel if and only if interior angles on the same side of the transversal and exterior angles on the same side of the transversal are supplementary (sum to 180°).

Calculation:

115° = angle y (Vertical opposite angle)

angle x + angle y = 180°

=> 115° + angle x = 180°

=> angle x = 65°

Complementary angle of angle x = 90° - 65°

=> Complemantary angle of angle x = 25°

Therefore Complementary angle of angle x is 25°

The correct option is 2 i.e. 25°

Q44. Answer: (a) 100 days

Given:

A and B can complete a work in 20 days.

B can complete a work in 25 days.

Formula used:

Work done = time × efficiency

Calculation:

LCM of (A + B) and B = 100

Efficiency of A + B = 5

Efficiency of B = 4

Efficiency of A = 1

Time taken by A = 100/1 = 100 days

Therefore The correct answer is 100 days.

Q45. Answer: (b) 1.26

Calculation:

0.25 + 1.37 – 0.36 = ?

=> 1.62 - 0.36 = ?

=> 1.26

Therefore 0.25 + 1.37 – 0.36 = 1.26

YourMockTest.com — Free Study Material

Q46. Answer: (a) Strings : Guitar

Logic:
Bristles : Brush → Bristles are a part of Brush.
Similarly,
Strings : Guitar → Strings are a part of the Guitar.
Here, 'Strings : Guitar ' is the correct pair as per logic.
Hence, the correct answer is "Strings : Guitar ".

Q47. Answer: (d) USBOHMF

The positional value of letter in alphabet series is;
Given;
'PAISE' is coded as 'QBJTF'
'CEASE' is coded as 'DFBTF'.
Similarly;
'TRANGLE' will be coded as
Hence, the correct answer is "Option(4)".

Q48. Answer: (a) 36

Logic: The pattern follows as,
Hence, the correct answer is 'option 1'.

Q49. Answer: (c) 49

The table shows the positional value of alphabets.
The logic followed here is:
=> FOSTER = 6 letters = $(6)^2 = 36$
=> DANCE = 5 letters = $(5)^2 = 25$
Similarly,
=> ORCHARD = 7 letters = $(7)^2 = 49$
Hence, the correct answer is "option (3)".

Q50. Answer: (a) NCWLX

The alphabets and their positions are:
The logic here is:
For the HINDI is coded as IKQHN

Similarly, the code for MATHS is:
Thus, the code for the given word is 'NCWLX'.
Hence, the correct answer is 'option 1'.

More previous year papers and mock tests: **www.yourmocktest.com/pyq**

YourMockTest.com — Free Study Material