# SSC CHSL 2020 Official Paper 20 ( Held on: 5 Aug 2021 Shift 2) (Previous Year Paper)

SSC Combined Higher Secondary Level (CHSL) • 2020 • 100 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/ssc-chsl/ssc-chsl-2020-official-paper-20-held-on-5-aug-2021-shift-2-pre…**

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

## ENGLISH LANGUAGE

**Q1.** Select the most appropriate ANTONYM of the given word.

Naive

**(a)** Immature
**(b)** Simple
**(c)** Sophisticated
**(d)** Unsuspicious

**Q2.** The following sentence has been divided into parts. One of them may contain an error. Select the part that contains the error from the given options. If you don't find any error, mark 'No error' as your answer.

The monkeys swinged / on the branches and / jumped over the compound wall.

**(a)** No error
**(b)** The monkeys swinged
**(c)** jumped over the compound wall
**(d)** on the branches and

**Q3.** Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the right order to form a meaningful and coherent paragraph.

A. Games involved gladiators fighting wild animals or each other.

B. Inside, tiered seating encircled the arena, where animals were caged and stage sets prepared.

C. Inaugurated in AD 80, the 50,000-seat Colosseum is also known as the Flavian Amphitheatre.

D. Rome's great gladiatorial arena is the most monumental of the city's ancient sights.

**(a)** BCAD
**(b)** DABC
**(c)** ADCB
**(d)** DCBA

**Q4.** Select the most appropriate word to fill in the blank.

The first van was sent as a _____ to mislead the thugs.

**(a)** temptation
**(b)** determination
**(c)** persuasion
**(d)** decoy

**Q5.** The following sentence has been divided into parts. One of them may contain an error. Select the part that contains the error from the given options. If you don't find any error, mark 'No error' as your answer.

The energy required / for perform various functions of the body / is obtained from food.

**(a)** is obtained from food
**(b)** for perform various functions of the body
**(c)** No error

**(d)** The energy required

**Q6.** Select the INCORRECTLY spelt word.

**(a)** Twinkle
**(b)** Whisper
**(c)** Readible
**(d)** Secluded

**Q7.** Select the most appropriate word to fill in the blank.

A micromanager frequently demands reports and updates leaving little room for subordinates to take _____ on their own.

**(a)** verdicts
**(b)** results
**(c)** decisions
**(d)** decrees

**Q8.** Select the INCORRECTLY spelt word.

**(a)** Altitude
**(b)** Aptitude
**(c)** Attitude
**(d)** Ataractive

**Q9.** Select the option that expresses the given sentence in reported speech.

Neil Armstrong said, “It’s a small step for man but a giant leap for mankind.”

**(a)** Neil Armstrong said that a small step for man can be giant leap for mankind.
**(b)** Neil Armstrong says that was a small step for man but a giant leap for mankind.
**(c)** Neil Armstrong had said that a small step for man is a giant leap for mankind.
**(d)** Neil Armstrong said that it was a small step for man but a giant leap for mankind.

**Q10.** Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select ‘No substitution required’.

What are the options available of me for a change of career?

**(a)** options available to me
**(b)** options available from me
**(c)** options available over me
**(d)** No substitution required

**Q11.** Select the most appropriate meaning of the given idiom.

Butter fingers

**(a)** To be very efficient
**(b)** To be clumsy
**(c)** To cook well
**(d)** To like rich food

**Q12.** Select the most appropriate option to substitute the underlined segment in the given sentence. If there is no need to substitute it, select ‘No substitution required’.

If the box breaking, the glass bottle will be shattered.

**(a)** No substitution required
**(b)** If the box breaks
**(c)** If the box broke
**(d)** If the box break

YourMockTest.com — Free Study Material

**Q13.** Select the option that can be used as a one-word substitute for the given group of words.

Instrument that measures the altitude of the land surface

**(a)** Altimeter
**(b)** Barometer
**(c)** Thermometer
**(d)** Chronometer

**Q14.** Select the most appropriate synonym of the given word.

Apathetic

**(a)** Irregular
**(b)** Instantaneous
**(c)** Irrelevant
**(d)** Indifferent

**Q15.** Select the option that can be used as a one-word substitute for the given group of words.

A place or scene of activity, debate, or conflict

**(a)** Arena
**(b)** Floor
**(c)** Site
**(d)** Stadium

**Q16.** Select the most appropriate meaning of the given idiom.

Large-hearted

**(a)** Generous
**(b)** Overweight
**(c)** Unhealthy
**(d)** Corrupt

**Q17.** Select the most appropriate synonym of the given word.

Salient

**(a)** Navigable
**(b)** Marine
**(c)** Noticeable
**(d)** Sturdy

**Q18.** Select the most appropriate ANTONYM of the given word.

Compel

**(a)** Persuade
**(b)** Dissuade
**(c)** Influence
**(d)** Induce

**Q19.** Sentences of a paragraph are given below in jumbled order. Arrange the sentences in the right order to form a meaningful and coherent paragraph.

A. Due to this tilt as the Earth wobbles around the Sun, different points of the Earth receive more or less sunlight.

B. Furthermore, we also wouldn't have solstices or equinoxes.

C. We know that seasons are caused by the Earth having a slight tilt on its axis.

D. If the Sun just shone directly on the Equator all year long, we would be left without seasons.

**(a)** CADB
**(b)** CBDA
**(c)** ACBD
**(d)** ABCD

YourMockTest.com — Free Study Material

**Q20.** Select the option that expresses the given sentence in passive voice.

Have you submitted the papers at the post office?

**(a)** Have the papers been submitted by you at the post office?
**(b)** Have the papers been submit by you at the post office?
**(c)** Had the papers submitted by you to the post office?
**(d)** Has the papers been submitted by you at the post office?

**Directions**

In the following passage, some words have been deleted. Select the most appropriate option to fill in each blank.

In the generation of hydroelectric power, water is collected or (1) ____ at a higher elevation and led downward (2) __ large pipes to a lower elevation; the difference in elevations is (3) __ as the head. At the end of its passage down the pipes, the falling water (4) __ turbines to rotate. The turbines in turn drive generators, (5) ____ convert the turbines' mechanical energy into electricity.

**Q21.** Select the most appropriate option to fill in blank no.1.

**(a)** hoarded
**(b)** stored
**(c)** deposited
**(d)** amassed

**Q22.** Select the most appropriate option to fill in blank no.2.

**(a)** beyond
**(b)** through
**(c)** over
**(d)** above

**Q23.** Select the most appropriate option to fill in blank no.3.

**(a)** known
**(b)** know
**(c)** told
**(d)** being known

**Q24.** Select the most appropriate option to fill in blank no.4.

**(a)** causes
**(b)** effects
**(c)** begins
**(d)** produces

**Q25.** Select the most appropriate option to fill in blank no.5.

**(a)** who
**(b)** which
**(c)** whose
**(d)** they

## GENERAL INTELLIGENCE

**Q26.** Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.

Statements:

Some ducks are hens.

Some hens are chickens.

Conclusions:

I. Some ducks are chickens.

YourMockTest.com – Free Study Material

II. Some hens are ducks.

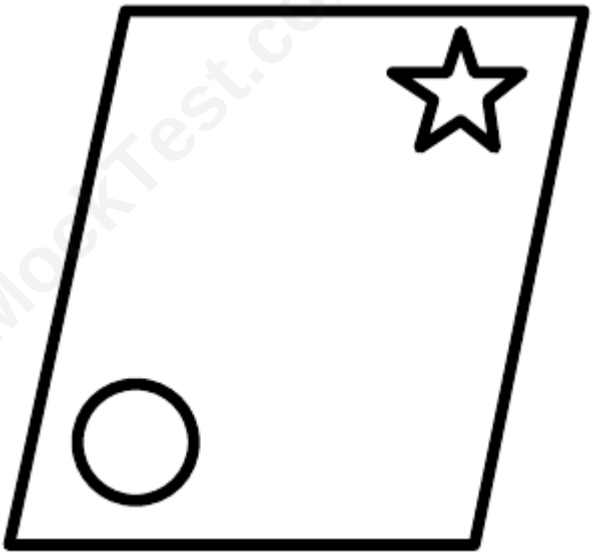
**(a)** Only conclusion I follows.
**(b)** Neither conclusion I nor II follows.
**(c)** Both conclusions I and II follow.
**(d)** Only conclusion II follows.

**Q27.** Select the number from among the given options that can replace the question mark (?) in the following series.

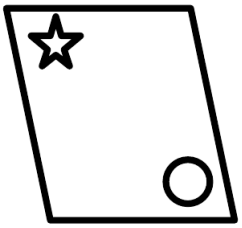
12, 22, 40, 74, 140, ?

**(a)** 270
**(b)** 268
**(c)** 280
**(d)** 274

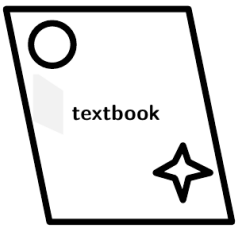
**Q28.** Select the correct mirror image of the given figure when the mirror is placed at the right side.



**(a)**

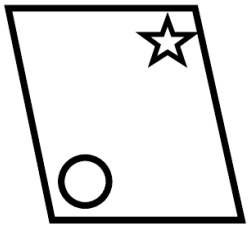


**(b)**

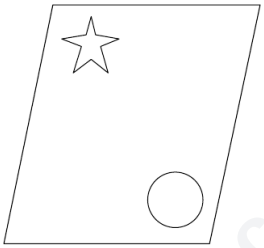



YourMockTest.com — Free Study Material

**(c)**



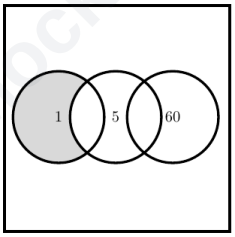
**(d)**



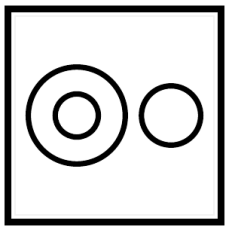
**Q29.** Select the Venn diagram that best represents the relationship between the following classes.

Women, Mothers, Sisters

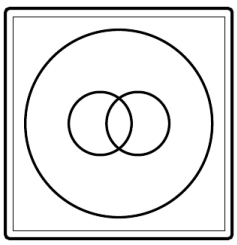
**(a)**



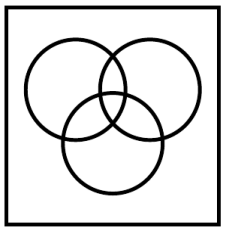

**(b)**



**(c)**

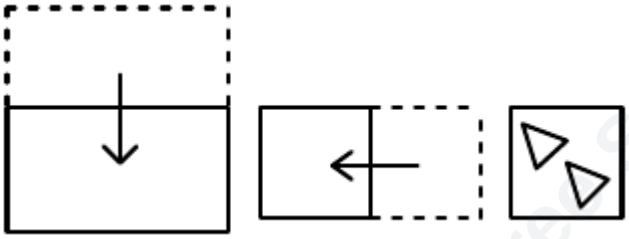


**(d)**

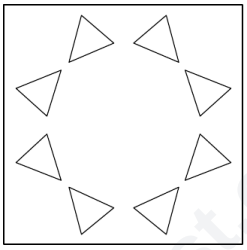


YourMockTest.com — Free Study Material

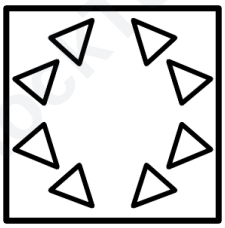
**Q30.** The sequence of folding a piece of paper and the manner in which the folded paper has been cut is shown in the following figures. How would this paper look when unfolded?



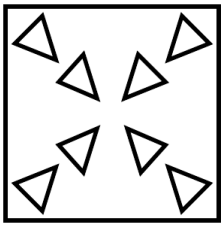
**(a)**



**(b)**



**(c)**



**(d)**




**Q31.** Select the option in which the words share the same relationship as that shared by the given pair of words.

Virus : Ebola

**(a)** Mosquito : Jaundice
**(b)** Season : Common cold
**(c)** Bacteria : Plague
**(d)** Fungi : Diarrhoea

**Q32.** Select the option that is related to the third term in the same way as the second term is related to the first term.

QUORATE : AEOQRTU :: SANDBOX : ?

**(a)** BOXSAND
**(b)** ASDNOBX

YourMockTest.com — Free Study Material

**(c)** ABDNOSX
**(d)** DNASXOB

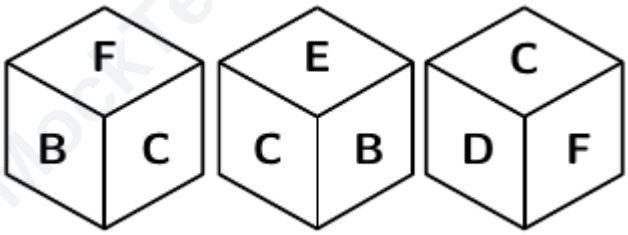
**Q33.** Tushar is the only son of Jitendra, and Kirti is the daughter of Jitendra's father's brother. Suhani is the sister of Tushar. How is Suhani related to Kirti?

**(a)** Niece
**(b)** Cousin
**(c)** Sister
**(d)** Aunt

**Q34.** Four words have been given, out of which three are alike in some manner and one is different. Select the word that is different.

**(a)** Genomics
**(b)** Geology
**(c)** Mycology
**(d)** Entomology

**Q35.** Three different positions of the same dice are shown. Select the letter that will be on the face opposite to the face having the letter E.




**(a)** F
**(b)** D
**(c)** A
**(d)** C

**Q36.** Select the option in which the numbers are related in the same way as are the numbers of the following set.

(72, 56, 42)

**(a)** (126, 102, 80)
**(b)** (80, 68, 58)
**(c)** (132, 110, 90)
**(d)** (80, 48, 24)

**Q37.** In a certain code language, ENVELOPE is written as IQZHPRTH. How will INTIMATE be written in that language?

**(a)** LPWPCWG
**(b)** KPVKOCVG
**(c)** NRYMREYI
**(d)** MQXLQDXH

**Q38.** Four numbers have been given in the options, out of which three are alike in some manner and one is different. Select the number that is different.

**(a)** 514
**(b)** 345
**(c)** 733
**(d)** 218

**Q39.** Select the correct option that indicates the arrangement of the given words in the order in which they appear in an English dictionary.

1. Expanse
2. Expansive

3. Expandable
4. Expansion
5. Expanded

**(a)** 3-2-1-5-4
**(b)** 5-3-1-2-4
**(c)** 3-5-1-4-2
**(d)** 1-2-5-3-4

**Q40.** Select the option in which the numbers share the same relationship as that shared by the given pair of numbers.

12 : 20

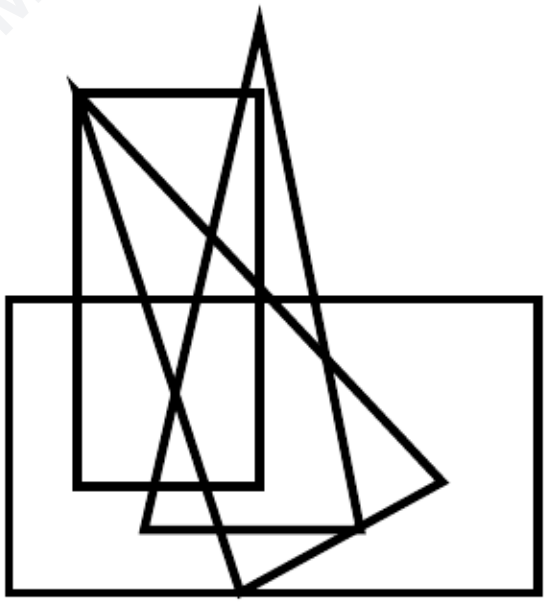
**(a)** 24 : 36
**(b)** 30 : 42
**(c)** 42 : 57
**(d)** 18 : 28

**Q41.** Select the option that is related to the third word in the same way as the second word is related to the first word.

Hindi : Devanagari :: English : ?

**(a)** Persian
**(b)** British
**(c)** Greek
**(d)** Latin

**Q42.** Select the option that is embedded in the given figure (rotation is NOT allowed).

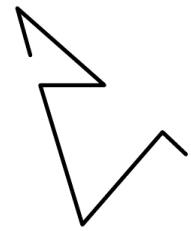


**(a)**

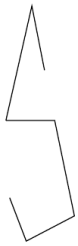


YourMockTest.com — Free Study Material

**(b)**



**(c)**



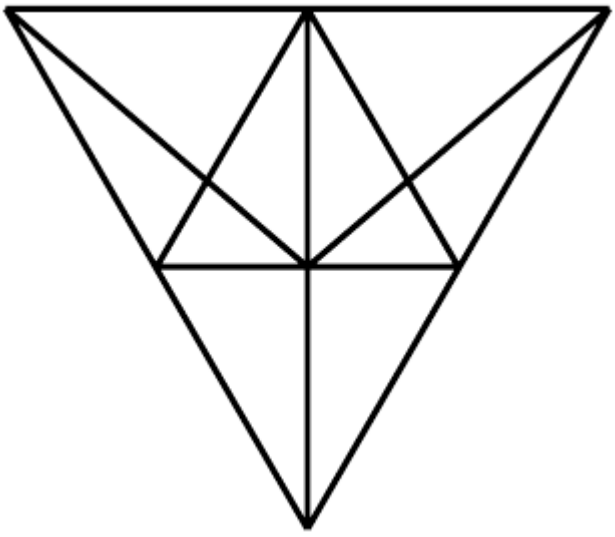
**(d)**



**Q43.** Four letter-clusters have been given in the options, out of which three are alike in some manner and one is different. Select the letter-cluster that is different.

**(a)** KOSW
**(b)** EHLQ
**(c)** ILPU
**(d)** ORVA

**Q44.** How many triangles are there in the given figure?



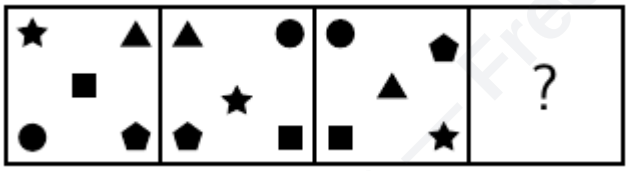
**(a)** 24
**(b)** 26
**(c)** 22
**(d)** 28

YourMockTest.com — Free Study Material

**Q45.** A notebook costs Rs. 12 each. A pen costs Rs. 9 each. Tina spends Rs. 123 on a total of 11 pieces of these articles. How many notebooks did she purchase?

**(a)** 9
**(b)** 6
**(c)** 11
**(d)** 8

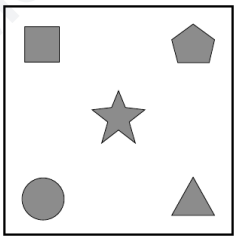
**Q46.** Select the figure from among the given options that can replace the question mark (?) in the following series.



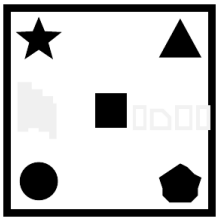

**(a)**



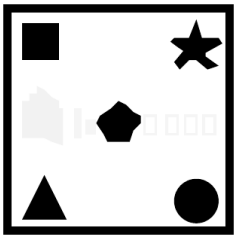
**(b)**



**(c)**



**(d)**



**Q47.** Select the combination of letters that when sequentially placed in the blanks of the given series will complete the series.

O _ E _ O Z _ T _ Z _ T

**(a)** T E Z O Z
**(b)** O E T Z T
**(c)** Z T E O E
**(d)** E Z T O E

YourMockTest.com — Free Study Material

**Q48.** In a certain code language, BOOTLACE is coded as 49960372 and CAPELIN is coded as 7382015. How will TAPIOCA be coded in that language?

**(a)** 5381963
**(b)** 3673819
**(c)** 6582975
**(d)** 6381973

**Q49.** Which two digits and signs need to be interchanged so as to balance the given equation?

97 ÷ 24 − 16 × 5 + 37 = 53

**(a)** 2 and 3; ÷ and −
**(b)** 2 and 3; + and ×
**(c)** 4 and 7; ÷ and +
**(d)** 7 and 6; + and −

**Q50.** Select the option in which the numbers are related in the same way as are the numbers of the following set.

221 : 348 : 517

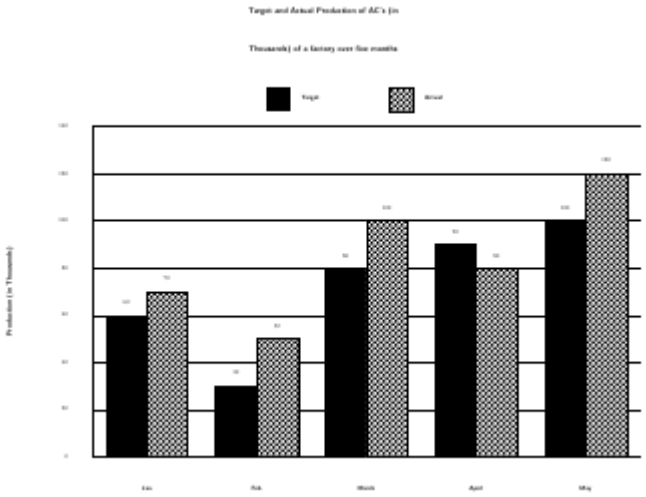
**(a)** 1005 : 1336 : 1733
**(b)** 343 : 512 : 729
**(c)** 1331 : 1728 : 2744
**(d)** 995 : 1326 : 1723

## QUANTITATIVE APTITUDE

**Q51.** If $\cos\theta = (P^2-1)/(P^2+1)$, $0°<\theta<90°$, then cosec θ is equal to:

**(a)** $2P/(1-P^2)$
**(b)** $(1+P^2)/2P$
**(c)** $2P/(1+P^2)$
**(d)** $(1-P^2)/2P$

**Q52.** Study the given graph which shows the Target and Actual production of ACs' (in thousands) of a factory over five months and answer the question that follows.

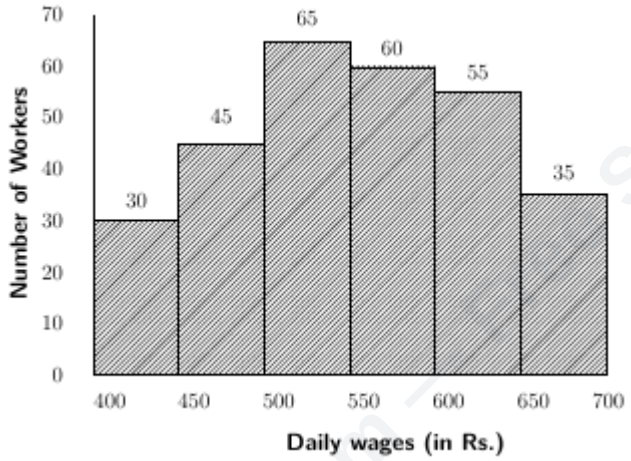


The ratio of the combined target production of ACs from January to April to that of the actual production of ACs from March to May is:

**(a)** 19 : 15
**(b)** 15 : 13
**(c)** 15 : 19
**(d)** 13 : 15

YourMockTest.com — Free Study Material

**Q53.** Study the graph which shows daily wages (in Rs.) with a number of workers and answer the question that follows.




If the ratio of the total number of workers whose daily wages are less than Rs. 450 to the total number of workers whose daily wages are Rs. 600 or above is a : b, then what is the difference between b and a?

**(a)** 2
**(b)** 3
**(c)** 0
**(d)** 1

**Q54.** If $7 \sin^2 \theta + 3 \cos^2 \theta = 4$, $0° < \theta < 90°$, then the value of $\theta$ will be:

**(a)** 45°
**(b)** 75°
**(c)** 60°
**(d)** 30°

**Q55.** The value of $(3 \tan^2 60° + \sec^2 30° - \sin^2 45°)/(\cos 15° + \sin 75°)(\sec 15° + \text{cosec } 75°)$ is:

**(a)** 13/12
**(b)** 5/12
**(c)** 65/24
**(d)** 59/24

**Q56.** The successive discounts 18%, 10% and 15% are equivalent to a single discount of:

**(a)** 41.32%
**(b)** 45.16%
**(c)** 37.27%
**(d)** 39.25%

**Q57.** In ΔABC, the length of BC is less than twice the length of AB by 2 cm. The length of AC exceeds the length of AB by 6 cm. The perimeter is 60 cm. The length (in cm) of the largest side of the triangle ABC is:

**(a)** 30
**(b)** 20
**(c)** 28
**(d)** 26

**Q58.** A bought an article for Rs. 4,800 and sold it at a loss of 30%. With this amount, he bought another article and sold it at a gain of 60%. What was his overall gain/loss?

**(a)** Gain 12%
**(b)** Gain 10%
**(c)** Loss 18%
**(d)** Loss 15%

**Q59.** A can do 60% of a work in 18 days, while B can do 40% of the same work in 10 days. Both work together for 10 days only. C completed the remaining work in 4 days. In how many days will C complete the same work?

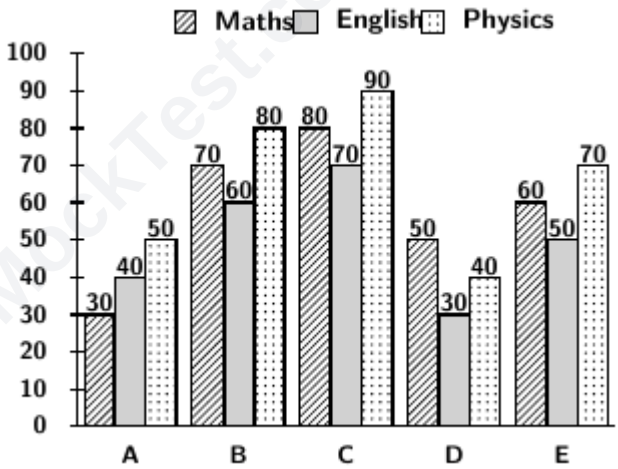
**(a)** 18
**(b)** 25
**(c)** 15
**(d)** 12

**Q60.** If $(4x - 5)^3 + (x - 2)^3 + 27(2x - 5)^3 = 9(4x - 5)(x - 2)(2x - 5)$, then the value of (x+3/2) will be:

**(a)** 3/2
**(b)** 5/2
**(c)** 1/2
**(d)** 7/2

**Q61.** Study the following graph and answer the question that follows.

Marks scored by five students A, B, C, D and E in three subjects (Maths, English and Physics)




What are the approximate average marks obtained by C?

**(a)** 80
**(b)** 65
**(c)** 70
**(d)** 75

**Q62.** If a nine-digit number 489x6378y is divisible by 72, then the value of √(8x+6y) will be:

**(a)** 4
**(b)** 6
**(c)** 8
**(d)** 10

**Q63.** The value of 613/5 ÷ [40 ÷ 2 of 5 + 27 ÷ 1/3-(78 ÷ 31/3)] is:

**(a)** 41/25
**(b)** 11/25
**(c)** -5
**(d)** 1

**Q64.** What will be the compound interest (in Rs.) on a sum of Rs. 7,200 for 18 months at a rate of 20% per annum, if the interest is compounded half-yearly (nearest to an integer)?

**(a)** 2,833
**(b)** 3,238
**(c)** 2,383
**(d)** 2,338

YourMockTest.com — Free Study Material

**Q65.** A train travels at a speed of 66 km/h and halts at five junctions for a certain time. It covers a distance of 1485 km in one day. For how long (in minutes) does the train stop at each junction, if it halts for the same period of time at all the junctions?

**(a)** 20
**(b)** 15
**(c)** 18
**(d)** 12

**Q66.** In ΔABC, angle A = 66°. If 'I' is the incentre of the triangle, then the measure of angle BIC will be:

**(a)** 109°
**(b)** 123°
**(c)** 112°
**(d)** 119°

**Q67.** If PA and PB are tangents drawn to a circle with centre O at A and B from external point P such that angle APB = 78°, then angle OAB is equal to:

**(a)** 39°
**(b)** 29°
**(c)** 12°
**(d)** 36°

**Q68.** If $9a^2 + 4b^2 + 49c^2 + 18 = 2(2b + 28c - 3a)$, then the value of (a + 2b - c) will be:

**(a)** 2/21
**(b)** 26/21
**(c)** 11/21
**(d)** 5/21

**Q69.** A circle is inscribed in a triangle ABC. It touches sides AB, BC and AC at points R, P and Q, respectively. If AQ = 6.5 cm, PC = 7.5 cm and BR = 9 cm, then the perimeter (in cm) of the triangle ABC will be:

**(a)** 27.5
**(b)** 46
**(c)** 55
**(d)** 23

**Q70.** The ratio of the incomes of A and B is 7 : 5. A and B save Rs. 4,000 and Rs. 3,500, respectively. If the expenditure of B is half the expenditure of A, then the total income of A and B (in Rs.) will be:

**(a)** 13,500
**(b)** 12,000
**(c)** 10,000
**(d)** 15,000

**Q71.** If $9x^2 - 6x + 1 = 0$, then the value of $27x^3 + (27x^3)^{(-1)}$ will be:

**(a)** 2
**(b)** 4
**(c)** 1
**(d)** 8

**Q72.** The average of eighteen numbers is 42. The average of the last ten numbers is 40 and that of the first five numbers is 44. The seventh number is 6 less than the sixth and 7 less that the eight number. The average of the sixth and the eight number is:

**(a)** 45
**(b)** 48
**(c)** 47.5
**(d)** 46.5

YourMockTest.com — Free Study Material

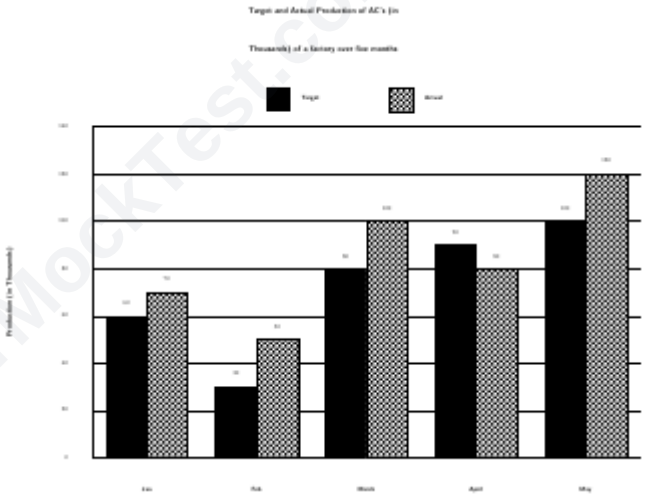
**Q73.** The income of A is 40% less than of B. If A gets 25% rise in his income B gets 40% rise in his income, then the percentage increase (correct to two decimal places) in the combined incomes of A and B will be:

**(a)** 37.86
**(b)** 35.19
**(c)** 31.67
**(d)** 34.38

**Q74.** From a rectangular sheet of dimensions 32 cm × 18 cm, a square of side 3 cm is cut from the four corners of the sheet and a box is made. The volume of the box is:

**(a)** 936 $cm^3$
**(b)** 1300 $cm^3$
**(c)** 946 $cm^3$
**(d)** 1305 $cm^3$

**Q75.** Study the given graph and answer the question that follows.



In which month is the actual production of ACs 20% more than its target production?

**(a)** March
**(b)** February
**(c)** January
**(d)** May

## GENERAL AWARENESS

**Q76.** Which of the following is a Kharif crop in North India and a Rabi crop in South India?

**(a)** Finger millet
**(b)** Barley
**(c)** Sesamum
**(d)** Wheat

**Q77.** Where was the Khelo India Ice Hockey Tournament held in January 2021?

**(a)** Chiktan
**(b)** Shargole
**(c)** Lungnak
**(d)** Drass

**Q78.** As per Union Budget 2021, 9% of the government revenue will be spent on _____.

**(a)** interest payments
**(b)** defence
**(c)** centrally sponsored schemes
**(d)** pensions

YourMockTest.com — Free Study Material

**Q79.** A Shadava Raga has only _____ notes in its scale.

**(a)** seven
**(b)** eight
**(c)** five
**(d)** six

**Q80.** Which of the following beaches was NOT awarded the international 'Blue Flag' certification by Foundation of Environment Education, Denmark as of October 2020?

**(a)** Kappad
**(b)** Talasari
**(c)** Ghoghla
**(d)** Rushikonda

**Q81.** The world's only floating national park, Keibul Lamjao National Park, is located in _____.

**(a)** Nagaland
**(b)** Tripura
**(c)** Manipur
**(d)** Assam

**Q82.** Who among the following was a World War II veteran, also associated with cricket?

**(a)** Erik Karlsson
**(b)** Ivan Cordoba
**(c)** Alan Burgess
**(d)** Brad Friedel

**Q83.** 'Purusha Sukta' is a hymn from which Veda?

**(a)** Atharvaveda
**(b)** Rigveda
**(c)** Samaveda
**(d)** Yajurveda

**Q84.** Which of the following was the country in focus at the 51st International Film Festival of India held in Goa in January 2021?

**(a)** Nepal
**(b)** Myanmar
**(c)** Bhutan
**(d)** Bangladesh

**Q85.** Which maharaja of Manipur signed the Instrument of Accession with the Government of India?

**(a)** Kulachandra Singh
**(b)** Bodhchandra Singh
**(c)** Nara Singh
**(d)** Gambhir Singh

**Q86.** Public Sector Banks account for about _____ of market share in Indian banking as per the Economic Survey 2019-20.

**(a)** 70%
**(b)** 80%
**(c)** 50%
**(d)** 40%

**Q87.** How many terabytes make one petabyte?

**(a)** 1024
**(b)** 1048
**(c)** 1084

YourMockTest.com — Free Study Material

**(d)** 1042

**Q88.** Who among the following politicians was the Home Minister of India in Rajiv Gandhi's cabinet from 1986 to 1989?

**(a)** Madhavrao Scindia
**(b)** Ashoke Kumar Sen
**(c)** Buta Singh
**(d)** Ajit Kumar Panja

**Q89.** Which was the first empire in ancient India to use elephants in its war on a large scale?

**(a)** Kushans
**(b)** Chola
**(c)** Magadha
**(d)** Shunga

**Q90.** Which of the following diseases is caused by Leishmania, a protozoan organism?

**(a)** Sleeping sickness
**(b)** Acne
**(c)** Kala-azar
**(d)** Malaria

**Q91.** In January 2021, the Defence Research Development Organisation (DRDO) developed India's first indigenous machine pistol called ‘Asmi’ in collaboration with _____.

**(a)** College of Military Engineering, Pune
**(b)** Central Ordnance Depot, Jabalpur
**(c)** Army War College, Mhow
**(d)** Infantry School, Mhow

**Q92.** The Sufi shrine Charar-e-Sharief (or Sharif) is located near _____ city.

**(a)** Lucknow
**(b)** Srinagar
**(c)** Hyderabad
**(d)** Mumbai

**Q93.** Who among the following did the Sports Authority of India appoint as the middle-and-long distance coach of the Indian athletics team in January 2021?

**(a)** Avinash Sable
**(b)** Nikolai Snesarev
**(c)** Adille Sumariwalla
**(d)** Radhakrishnan Nair

**Q94.** Which of the following Articles of the Constitution of India deals with the organisation of agriculture and animal husbandry?

**(a)** Article 84
**(b)** Article 29
**(c)** Article 48
**(d)** Article 92

**Q95.** Which web portal and mobile application did the Ministry of Housing and Urban Affairs, Government of India, launch in December 2020?

**(a)** e-Uparjan
**(b)** e-Rozgar
**(c)** e-Sampada
**(d)** e-Dharti

YourMockTest.com — Free Study Material

**Q96.** The inertia of an object is measured by its _____.

**(a)** volume
**(b)** speed
**(c)** area
**(d)** mass

**Q97.** Which of the following is a main species of moist deciduous forests?

**(a)** Khejri
**(b)** Neem
**(c)** Sandalwood
**(d)** Amaltas

**Q98.** Who discovered blood circulation?

**(a)** Rosalind Franklin
**(b)** Charles Darwin
**(c)** David Baltimore
**(d)** William Harvey

**Q99.** Which of the following watershed development projects is sponsored by the Central Government aims at enabling the rural population to conserve water?

**(a)** Arvary Pani Sansad
**(b)** Haryali
**(c)** Jal Kranti Abhiyan
**(d)** Neeru-Meeru

**Q100.** Which of the following is a single user operating system?

**(a)** Linux
**(b)** Windows 7
**(c)** MS-DOS
**(d)** Windows NT

## ANSWER KEY

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | c | 2 | b | 3 | d | 4 | d | 5 | b | 6 | c | 7 | c | 8 | d | 9 | d | 10 | a |
| 11 | b | 12 | b | 13 | a | 14 | d | 15 | a | 16 | a | 17 | c | 18 | b | 19 | a | 20 | a |
| 21 | b | 22 | b | 23 | a | 24 | a | 25 | b | 26 | d | 27 | a | 28 | a | 29 | c | 30 | d |
| 31 | c | 32 | c | 33 | a | 34 | b | 35 | a | 36 | c | 37 | d | 38 | c | 39 | c | 40 | b |
| 41 | d | 42 | c | 43 | a | 44 | d | 45 | d | 46 | a | 47 | c | 48 | d | 49 | d | 50 | a |
| 51 | b | 52 | d | 53 | a | 54 | d | 55 | d | 56 | c | 57 | d | 58 | a | 59 | c | 60 | d |
| 61 | a | 62 | c | 63 | d | 64 | c | 65 | c | 66 | b | 67 | a | 68 | a | 69 | b | 70 | b |
| 71 | a | 72 | c | 73 | d | 74 | a | 75 | d | 76 | c | 77 | a | 78 | c | 79 | d | 80 | b |
| 81 | c | 82 | c | 83 | b | 84 | d | 85 | b | 86 | a | 87 | a | 88 | c | 89 | c | 90 | c |
| 91 | d | 92 | b | 93 | b | 94 | c | 95 | c | 96 | d | 97 | c | 98 | d | 99 | b | 100 | c |

## SOLUTIONS

**Q1. Answer: (c) Sophisticated**

The solution is in Hindi. Read it online.

**Q2. Answer: (b) The monkeys swinged**

The solution is in Hindi. Read it online.

**Q3. Answer: (d) DCBA**

The correct answer is 'DCBA'.

Key Points

• The given question is an example of a Para Jumble.

• We know that the first statement of a para jumbled question is usually an independent general statement, a noun, a universal fact, starting of an incident, or it starts with 'most' or 'once'.

• Sentence D will be the first sentence because it is an introductory sentence and independent of all the other sentences.

• Sentence C will be the next sentence because Sentence D is telling about the great gladiatorial arena of Rome and Sentence C further explains it.

• Sentence B will be the next sentence because it tells us how the arena looked like.

• Lastly, Sentence A will be used.

• D: Rome’s great gladiatorial arena is the most monumental of the city's ancient sights.

• C: Inaugurated in AD 80, the 50,000-seat Colosseum is also known as the Flavian Amphitheatre.

• B: Inside, tiered seating encircled the arena, where animals were caged and stage sets prepared.

• A: Games involved gladiators fighting wild animals or each other.

• Therefore, as per the points mentioned above, we find that the correct answer is Option 4.

Correct Sentence: Rome’s great gladiatorial arena is the most monumental of the city's ancient sights. Inaugurated in AD 80, the 50,000-seat Colosseum is also known as the Flavian Amphitheatre. Inside, tiered seating encircled the arena, where animals were caged and stage sets prepared. Games involved gladiators fighting wild animals or each other.

**Q4. Answer: (d) decoy**

The solution is in Hindi. Read it online.

**Q5. Answer: (b) for perform various functions of the body**

The solution is in Hindi. Read it online.

**Q6. Answer: (c) Readible**

The solution is in Hindi. Read it online.

**Q7. Answer: (c) decisions**

The solution is in Hindi. Read it online.

**Q8. Answer: (d) Ataractive**

The solution is in Hindi. Read it online.

**Q9. Answer: (d) Neil Armstrong said that it was a small step for man but a giant leap for mankind.**

The solution is in Hindi. Read it online.

**Q10. Answer: (a) options available to me**

The solution is in Hindi. Read it online.

**Q11. Answer: (b) To be clumsy**

The solution is in Hindi. Read it online.

**Q12. Answer: (b) If the box breaks**

The solution is in Hindi. Read it online.

**Q13. Answer: (a) Altimeter**

The solution is in Hindi. Read it online.

**Q14. Answer: (d) Indifferent**

The solution is in Hindi. Read it online.

**Q15. Answer: (a) Arena**

The solution is in Hindi. Read it online.

**Q16. Answer: (a) Generous**

The solution is in Hindi. Read it online.

YourMockTest.com — Free Study Material

**Q17. Answer: (c) Noticeable**

The solution is in Hindi. Read it online.

**Q18. Answer: (b) Dissuade**

The solution is in Hindi. Read it online.

**Q19. Answer: (a) CADB**

The correct answer is 'CADB'.

Key Points

• The given question is an example of a Para Jumble.

• We know that the first statement of a para jumbled question is usually an independent general statement, a noun, a universal fact, starting of an incident, or it starts with 'most' or 'once'.

• Sentence C will be the first sentence because it is talking about the seasons that are caused by the tilt of the Earth's axis.

• Sentence A will be the next sentence because it is connected with Sentence C.

• Sentence D will be the next sentence because it is connected with the previous sentence.

• Lastly, Sentence B will be used.

• Thus, the correct sequence is:

• C: We know that seasons are caused by the Earth having a slight tilt on its axis.

• A: Due to this tilt as the Earth wobbles around the Sun, different points of the Earth receive more or less sunlight.

• D: If the Sun just shone directly on the Equator all year long, we would be left without seasons.

• B: Furthermore, we also wouldn't have solstices or equinoxes.

• Therefore, as per the points mentioned above, we find that the correct answer is Option 1.

Correct Sequence: We know that seasons are caused by the Earth having a slight tilt on its axis. Due to this tilt as the Earth wobbles around the Sun, different points of the Earth receive more or less sunlight. If the Sun just shone directly on the Equator all year long, we would be left without seasons. Furthermore, we also wouldn't have solstices or equinoxes.

**Q20. Answer: (a) Have the papers been submitted by you at the post office?**

The solution is in Hindi. Read it online.

**Q21. Answer: (b) stored**

The solution is in Hindi. Read it online.

**Q22. Answer: (b) through**

The solution is in Hindi. Read it online.

**Q23. Answer: (a) known**

The solution is in Hindi. Read it online.

**Q24. Answer: (a) causes**

The solution is in Hindi. Read it online.

**Q25. Answer: (b) which**

The solution is in Hindi. Read it online.

**Q26. Answer: (d) Only conclusion II follows.**

The least possible Venn diagram is:

Conclusions:

I. Some ducks are chickens → False (it is possible but not definite, as no direct relation between ducks and chickens)

II. Some hens are ducks → True (as some ducks are hens)

Hence, only conclusion II follows.

**Q27. Answer: (a) 270**

Given: 12, 22, 40, 74, 140, ?

The logic followed here is:

Hence, 270 is the correct answer.

YourMockTest.com — Free Study Material

**Q28. Answer: (a) [figure]**

Given:

The logic followed here here is: line AB is the mirror,

Hence, option (1) is the correct answer.

**Q29. Answer: (c) [figure]**

Given: Women, Mothers, Sisters

The logic followed here is:

All mothers and sisters are women. Some mothers can be sisters.

Hence, option (3) is the correct answer.

**Q30. Answer: (d) [figure]**

Mistake Points Here, in the given question, the paper is unfolded in opposite direction, so you have to unfold the paper according to the given direction.

The logic followed here is:

The paper when unfolded will look like this:

Hence, option (4) is the correct answer.

**Q31. Answer: (c) Bacteria : Plague**

Given: Virus : Ebola

The logic followed here is:

Ebola is a disease which is caused by Virus.

Similarly,

Plague is a disease which is caused by Bacteria.

Hence, bacteria : plague is the correct answer.

**Q32. Answer: (c) ABDNOSX**

The table is alphabets place value:

Given: QUORATE : AEOQRTU :: SANDBOX : ?

The logic followed here is: Arrange the letters in the alphabetical order.

QUORATE : AEOQRTU

Similarly,

SANDBOX : ?

Hence, ABDNOSX is the correct answer.

**Q33. Answer: (a) Niece**

From the given information,

(1) Tushar is the only son of Jitendra, and Kirti is the daughter of Jitendra's father's brother.

(2) Suhani is the sister of Tushar. So, the final family tree is as follows,

Hence, Suhani is the niece of Kirti.

**Q34. Answer: (b) Geology**

By checking the options:

(1) Genomics → the branch of molecular biology concerned with the structure, function, evolution, and mapping of genomes.

(2) Geology → the science which deals with the physical structure and substance of the earth, their history, and the processes which act on them.

(3) Mycology → the scientific study of fungi.

(4) Entomology → the branch of zoology concerned with the study of insects.

Hence, Geology is the odd one.

**Q35. Answer: (a) F**

Given:

Logic: If two dice have the same face value in the given image then their clockwise or anticlockwise number are the opposite numbers in dice.

While moving in a clockwise direction from the common face (C) in dice (2) and dice (3):

From both dices:

| Dice 2 | C | E | B |
|---|---|---|---|
| Dice 3 | C | F | D |

Now, F is opposite to E, thus F will be on the face opposite to the face having the letter E.
Hence, F is the correct answer.
Shortcut TrickThe pattern followed here is:
From dice 1 and 2:
B and C both letters are common so remaining letter E and F will be opposite to each other.
Hence, the correct answer is "F".

**Q36. Answer: (c) (132, 110, 90)**

Given: (72, 56, 42)
The logic followed here is:
(72, 56, 42) → 9 × 8 = 72, 8 × 7 = 56, and 7 × 6 = 42
By checking the options, only option (3) follows the same logic given above,
(132, 110, 90) → 12 × 11 = 132, 11 × 10 = 110, and 10 × 9 = 90
Hence, (132, 110, 90) is the correct answer.

**Q37. Answer: (d) MQXLQDXH**

The table is alphabets place value:
Given: ENVELOPE is written as IQZHPRTH.
The logic followed here is:
Similarly,
Hence, MQXLQDXH is the correct answer.

**Q38. Answer: (c) 733**

By checking the options:
(1) 514 → $8^3 + 2 = 512 + 2 = 514$
(2) 345 → $7^3 + 2 = 343 + 2 = 345$
(3) 733 → $9^3 + 2 = 729 + 2 = 731 \neq 733$
(4) 218 → $6^3 + 2 = 216 + 2 = 218$
Hence, 733 is different.

**Q39. Answer: (c) 3-5-1-4-2**

Arranging all the words as per their order in the dictionary:
3. Expandable
5. Expanded
1. Expanse
4. Expansion
2. Expansive
Hence, 3-5-1-4-2 is the correct answer.

**Q40. Answer: (b) 30 : 42**

Given: 12 : 20
The logic followed here is:
12 : 20 → 3 × 3 + 3 = 9 + 3 = 12, and 4 × 4 + 4 = 16 + 4 = 20
Similarly,
Only option (2) follows the same logic given above,
30 : 42 → 5 × 5 + 5 = 25 + 5 = 30, and 6 × 6 + 6 = 36 + 6 = 42
Hence, 30 : 42 is the correct answer.
Alternate Method
The logic followed here is:

YourMockTest.com — Free Study Material

12 : 20 → 4 × 3 = 12, 4 × 5 = 20

Similarly, only option (2) follows the same logic given above,

30 : 42 → 6 × 5 = 30, 6 × 7 = 42

Hence, 30 : 42 is the correct answer.

**Q41. Answer: (d) Latin**

Given: Hindi : Devanagari :: English : ?

The logic followed here is:

Devanagari is the script of Hindi.

Similarly,

Latin is the script of English.

Hence, latin is the correct answer.

Additional Information

• Latin or Roman script, is a writing system used to write many modern-day languages. It is the most used writing system in the world today. It is the official script for nearly all the languages of Western Europe and of some Eastern European languages.

• Hindi is written in Devanagari script, which is made of two Sanskrit words: Deva, meaning 'God' and Nagari, meaning 'of urban origin'. Devanagari has its origin in Brahmi script.

**Q42. Answer: (c) [figure]**

Given:

The logic followed here is: only option (3) is embedded as shown below,

Hence, option (3) is the correct answer.

Important Points

• Do not get tensed by the complexity of the figures.

• Carefully understand the structure of the given question figure.

• The embedded figure may not be of exact size. It may be small or big.

• Sometimes the rotation or reflection of the figures may be confusing.

• So think wisely before selecting the answer.

**Q43. Answer: (a) KOSW**

By checking options:

(1) KOSW

(2) EHLQ

(3) ILPU

(4) ORVA

Hence, KOSW is different.

**Q44. Answer: (d) 28**

By counting the triangles:

Hence, 28 is the correct answer.

**Q45. Answer: (d) 8**

Given: A notebook costs Rs. 12 each. A pen costs Rs. 9 each. Tina spends Rs. 123 on a total of 11 pieces of these articles.

Let the number of notebooks be 'N' and the number of pens be 'P'.

The, according to the question:

N + P = 11, implies, P = 11 - N

and,

12N + 9P = 123

12N + 9 × (11 - N) = 123

12N + 99 - 9N = 123

3N + 99 = 123

3N = 123 - 99

3N = 24

N = 24 ÷ 3

YourMockTest.com — Free Study Material

N = 8

Hence, the number of notebooks are 8.

**Q46. Answer: (a) [figure]**

Given:

The logic followed here is as given below, in each step

Therefore, following the same pattern, the final series is as follows:

Hence, option (1) is the correct answer.

**Q47. Answer: (c) Z T E O E**

Given: O _ E _ O Z _ T _ Z _ T

By checking options,

(1) T E Z O Z→ O T E E / O Z Z T / O Z Z T

(2) O E T Z T → O O E E / O Z T T / Z Z T T

(3) Z T E O E → O Z E T / O Z E T / O Z E T

Here "O Z E T" is repeated.

(4) E Z T O E → O E E Z / O Z T T / O Z E T

• Option (3) gives a pattern of O Z E T - O Z E T - O Z E T.

Hence, Z T E O E is the correct answer.

**Q48. Answer: (d) 6381973**

Given: BOOTLACE is coded as 49960372 and CAPELIN is coded as 7382015.

The logic followed here is:

BOOTLACE is coded as 49960372.

| Letters | B | O | O | T | L | A | C | E |
|---|---|---|---|---|---|---|---|---|
| Codes | 4 | 9 | 9 | 6 | 0 | 3 | 7 | 2 |

And,

CAPELIN is coded as 7382015.

| Letters | C | A | P | E | L | I | N |
|---|---|---|---|---|---|---|---|
| Codes | 7 | 3 | 8 | 2 | 0 | 1 | 5 |

Similarly,

TAPIOCA is coded as:

| Letters | T | A | P | I | O | C | A |
|---|---|---|---|---|---|---|---|
| Codes | 6 | 3 | 8 | 1 | 9 | 7 | 3 |

Hence, 6381973 is the correct answer.

**Q49. Answer: (d) 7 and 6; + and −**

Given: 97 ÷ 24 − 16 × 5 + 37 = 53

By checking options and interchanging the signs accordingly,

(1) 2 and 3; ÷ and −

LHS = 97 - 34 ÷ 16 × 5 + 27

= 97 - 2.125 × 5 + 27

= 97 - 10.625 + 27

= 124 - 10.625

= 113.375 ≠ 52 (RHS)

LHS ≠ RHS

(2) 2 and 3; + and ×

= 97 ÷ 34 − 16 + 5 × 27

= 2.85 - 16 + 5 × 27

= 2.85 - 16 + 135

= 137.85 - 16
= 121.85 ≠ 52 (RHS)
LHS ≠ RHS
(3) 4 and 7; ÷ and +
= 94 + 27 − 16 × 5 ÷ 34
= 94 + 27 - 16 × 0.147
= 94 + 27 - 2.352
= 121 - 2.352
= 118.648 ≠ 53 (RHS)
LHS ≠ RHS
(4) 7 and 6; + and −
LHS = 96 ÷ 24 + 17 × 5 - 36
= 4 + 17 × 5 - 36
= 4 + 85 - 36
= 89 - 36
= 53 (RHS)
LHS = RHS
Hence, 7 and 6; + and − is the correct answer.

**Q50. Answer: (a) 1005 : 1336 : 1733**

Given: 221 : 348 : 517
The logic followed here is:
221 : 348 : 517
$6^3 = 216 \rightarrow 216 + 5 = 221$
$7^3 = 343 \rightarrow 343 + 5 = 348$
$8^3 = 512 \rightarrow 512 + 5 = 517$
By checking options, we get that only option (1) follow the same logic given above,
1005 : 1336 : 1733
$10^3 = 1000 \rightarrow 1000 + 5 = 1005$
$11^3 = 1331 \rightarrow 1331 + 5 = 1336$
$12^3 = 1728 \rightarrow 1728 + 5 = 1733$
Hence, 1005 : 1336 : 1733 is the correct answer.

**Q51. Answer: (b) $(1+P^2)/2P$**

Given:
$\cos\theta = [(P^2 – 1)]/[(P^2 + 1)]$
Concept used:
$\cos\theta = B/H$
$\text{Cosec}\theta = H/P$
P = perpendicular; B = Base; H = hypotenuse.
Calculation:
According to the question,
$\Rightarrow \cos\theta = (P^2-1)/(P^2+1)$
Here, $B = P^2 - 1$ ; $H = P^2 + 1$
$P = \sqrt{(H^2 – B^2)}$
$\Rightarrow \sqrt{[(P^2 + 1)^2 – (P^2 – 1)^2]}$
$\Rightarrow \sqrt{(P\text{^}4 + 1 + 2P^2 – P\text{^}4 – 1 + 2P^2)}$
$\Rightarrow \sqrt{4P^2}$
$\Rightarrow 2P$
So,
$\Rightarrow \text{Cosec}\theta = (P^2 + 1)/2P$
Therefore The value of Cosec θ is $(P^2 + 1)/2P$

YourMockTest.com — Free Study Material

**Q52. Answer: (d) 13 : 15**

Calculation:

Total target production from Jan to April = 60 + 30 + 80 + 90 = 260

Total actual production from March to May = 100 + 80 + 120 = 300

Required Ratio = 260 : 300

=> 13 : 15

Therefore Required ratio is 13 : 15

**Q53. Answer: (a) 2**

Calculation:

No. of workers whose daily wages are less than 450 = 30

No. of workers whose daily wages are more than 600 = 90

So, the required ratio = 1 : 3 = a : b

=> b - a = 3 - 1 = 2 units

Therefore The required answer is 2

**Q54. Answer: (d) 30°**

Given:

$7\sin^2\theta + 3\cos^2\theta = 4$

Concept used:

Calculation:

$7\sin^2\theta + 3\cos^2\theta = 4$

$\Rightarrow 7\sin^2\theta + 3(1 - \sin^2\theta) = 4$

$\Rightarrow 7\sin^2\theta + 3 - 3\sin^2\theta = 4$

$\Rightarrow 4\sin^2\theta = 1$

$\Rightarrow \sin^2\theta = 1/4$

$\Rightarrow \sin\theta = 1/2$

$\Rightarrow \theta = 30°$

Therefore The value of θ is 30°

**Q55. Answer: (d) 59/24**

Given:

$(3\tan^2 60° + \sec^2 30° - \sin^2 45°)/(\cos 15° + \sin 75°)(\sec 15° + \operatorname{cosec} 75°)$

Concept used:

Calculation:

$(3\tan^2 60° + \sec^2 30° - \sin^2 45°)/(\cos 15° + \sin 75°)(\sec 15° + \operatorname{cosec} 75°)$

$[3 \times (\sqrt{3})^2 + (2/\sqrt{3})^2 - (1/\sqrt{2})^2]/[\{\cos 15° + \sin(90 - 15)\}\{\sec 15° + \operatorname{cosec}(90 - 15)\}]$

$\Rightarrow (3 \times 3 + 4/3 - 1/2)/[(2\cos 15°)(2\sec 15°)]$

$\Rightarrow [(54 + 8 - 3)/6]/[(2\cos 15°)(2/\cos 15°)]$

$\Rightarrow 59/24$

Therefore Required answer is 59/24

**Q56. Answer: (c) 37.27%**

Shortcut Trick

Let the Initial Price be 100.

Price after 18% discount = 100 − 18 = 82.

Price after 10% discount = 82 − 8.2 = 73.8.

Price after 15% discount = 73.8 − (0.15 × 73.8) = 73.8 − 11.07 = 62.73.

Equivalent Discount = 100 − 62.73 = 37.27%.

Therefore The correct answer is 37.27%.

Alternate Method

Given: Successive discounts are 18%, 10%, and 15%.

Formula: Successive Discount for two rates a and b = (a + b − (a × b) ÷ 100)%

YourMockTest.com — Free Study Material

=> First two discounts (18% and 10%): 18 + 10 − (18 × 10) ÷ 100 = 28 − 1.8 = 26.2%

=> Now combine 26.2% and 15%: 26.2 + 15 − (26.2 × 15) ÷ 100

=> 41.2 − (393 ÷ 100) = 41.2 − 3.93 = 37.27%

Therefore The correct answer is 37.27%.

Additional Information

Successive Discount Concept

When multiple discounts are applied one after another, the net discount is always less than the sum of individual discounts. Formula: Net SP = MP × (1 − d1/100) × (1 − d2/100) × (1 − d3/100).

Order of Discounts

The final equivalent discount remains the same regardless of the order in which the successive discounts are applied (e.g., 10%, 15%, 18% yields the same result).

**Q57. Answer: (d) 26**

Given:

The perimeter of Δ ABC = 60 cm.

Calculation:

Let the length of AB be x cm

So, the length of BC = (2x - 2) cm and the length of AC = (x + 6) cm

The perimeter of Δ ABC = 60 cm.

=> x + 2x - 2 + x + 6 = 60

=> 4x + 4 = 60

=> 4x = 56

=> x = 14

The lengths of the sides of the triangle are:

AB = 14 cm

BC = (2x - 2) cm = 26 cm

AC = (x + 6) = 20 cm

Therefore The length of the largest side of the triangle is 26 cm.

**Q58. Answer: (a) Gain 12%**

Given:

Cost price of the article = Rs. 4800

Loss % = 30

Profit % = 60

Concept used:

SP = CP + CP × profit%

SP = CP – CP × loss%

Calculation:

SP of the article = 4800 × 7/10

=> 3360

SP of the new article = 3360 × 8/5

=> 5376

Profit = 5376 – 4800 = 576

Profit % = (576/4800) × 100

=> 12%

Therefore Required answer is 12% gain

Alternate Method- 30 + 60 + [(-30)(60)/100]

=> + 30 – 18

=> + 12

Therefore Required answer is 12% gain

**Q59. Answer: (c) 15**

Given:

A can do 60% in 18 days

B can do 40% in 10 days

Concept used:

Total work = LCM of time taken by the workers

Efficiency = Total work/Time taken by the worker

Calculation:

A can do 60% in 18 days

A can do 100% in 30 days

B can do 40% in 10 days

B can do 100% in 25 days

| Efficiency | Person | Time | Total work |
|---|---|---|---|
| 5 | A | 30 | 150 |
| 6 | B | 25 | |

In 10 they will complete (6 + 5) × 10 = 110 units of the work

Remaining 40 units to be done in 4 days by C

So Efficiency of C = 40/4 = 10 units/day

So, C will do in 150/10 = 15 days

Therefore C can complete the task in 15 days alone

**Q60. Answer: (d) 7/2**

Given:

$(4x - 5)^3 + (x - 2)^3 + 27(2x - 5)^3 = 9(4x - 5)(x - 2)(2x - 5)$

Concept used:

If x + y + z = 0 then,

$x^3 + y^3 + z^3 = 3xyz$

Calculation:

$(4x - 5)^3 + (x - 2)^3 + 27(2x - 5)^3 = 9(4x - 5)(x - 2)(2x - 5)$

$\Rightarrow (4x - 5)^3 + (x - 2)^3 + 27(2x - 5)^3 - 3(4x - 5)(x - 2)3(2x - 5) = 0$

$\Rightarrow (4x - 5) + (x - 2) + 3(2x - 5) = 0$

$\Rightarrow 4x - 5 + x - 2 + 6x - 15 = 0$

$\Rightarrow 11x = 22$

$\Rightarrow x = 2$

$(x + 3/2) = 2 + 3/2 = (4 + 3)/2$

$\Rightarrow 7/2$

Therefore Required answer is 7/2

**Q61. Answer: (a) 80**

Calculation:

Marks of C in Maths = 70

Marks of C in English = 80

Marks of C in Physics = 90

Total marks = 70 + 80 + 90 = 240

Average = 240/3 = 80

Therefore Required average is 80

**Q62. Answer: (c) 8**

Given:

489x6378y is divisible by 72

Concept used:

If the sum of digits of the number is divisible by 9, then the number itself is divisible by 9
If the last three digits of a number are divisible by 8, then the number is completely divisible by 8
Calculation:
72 = 8 × 9
=> 78y should be divisible by 8
So, y = 4
=> 489x63784 is divisible by 9
So,
=> 4 + 8 + 9 + x + 6 + 3 + 7 + 8 + 4 = 49 + x
=> x = 5
So,
√(8x + 6y) = √64
=> 8
Therefore The required answer is 8

**Q63. Answer: (d) 1**

Given:
613/5 ÷ [40 ÷ 2 of 5 + 27 ÷ 1/3-(78 ÷ 31/3)]
Concept used:
Calculation:
=> 308/5 ÷ [40 ÷ 2 of 5 + 27 ÷ 1/3 – (78 × 3/10)]
=> 308/5 ÷ [40 ÷ 2 of 5 + 27 ÷ 1/3 – 23.4]
=> 308/5 ÷ [40 ÷ 10 + 27 ÷ 1/3 – 23.4]
=> 308/5 ÷ [4 + 81 – 23.4]
=> 308/5 ÷ 61.6
=> 308/5 ÷ 616/10
=> 308/5 ÷ 308/5
=> 1
Therefore Required answer is 1

**Q64. Answer: (c) 2,383**

Given:
Principal = Rs. 7200
Rate of interest = 20%
Concept used:
In case of half yearly
Amount = $P(1 + (r/2)/100)^n$
Interest = Amount - Principal
P = Principal
r = rate
n = time
Calculation:
Half yearly interest = 20/2 = 10%
Amount = $7200(1 + 10/100)^3$
=> 7200 × 11/10 × 11/10 × 11/10
=> 9583.2
Interest = 9583.2 - 7200 = 2383.2 ≈ 2383
Therefore The compound interest is Rs. 2383
Alternate MethodConcept used:
Effective rate for 3 years = 3r + 3r²over100 + r³over10000
Calculation:
Interest is compounded half-yearly, then

Rate = 20/2 = 10% ; Time = (3/2) × 2 = 3 years
Effective rate for 3 years at 10% = 33.1%
C.I = 7200 × 33.1% = Rs. 2383.2 ≈ Rs. 2383
Therefore The correct answer is Rs. 2383

**Q65. Answer: (c) 18**

Given:
Speed of the train = 66 km/h
Concept used:
Distance = Speed × time
Calculation:
Without stoppage train moves 66 × 24 = 1584 kms
For stoppage it is moving 1584 – 1485 = 99 km less
Time takes to cover 99 km by the train = 99/66 = 1.5 hours or 90 min
So, duration of each stops = 90/5 = 18 min
Therefore Required answer is 18 minutes

**Q66. Answer: (b) 123°**

Given:
In ΔABC, angle A = 66°
Formula Used:
As we know incentre is the meet point of all the angle bisectors
Angle at the Incentre of a triangle = 90° + angle Angle to its corosponding side/2
Calculation:
Substituting the values in the formula
angle BIC= 90° + 66/2
=> angle BIC = 123°
Therefore angle BIC is 123°

**Q67. Answer: (a) 39°**

Given:
angle APB = 78°
Concept used:
Sum of the angle of quadrilateral = 360°
Sum of the angle of triangle = 180°
Calculation:
The sum of the angle of quadrilateral = 360°
angle A + angle B + angle O + angle P = 360°
AP and BP are tangent to the circle
angle OAP = angle OBP = 90°
=> 90° + 90° + angle O + 78° = 360°
=> angle O = 360° – 90° + 90° – 78°
=> angle O = 102°
angle OBA = angle OAB
The sum of the angle of triangle = 180°
angle AOB + angle OAB + angle OBA = 180°
=> 102° + 2angle OAB = 180°
=> angle OAB = 78/2
=> angle OAB = 39°
Therefore The value of angle OAB is 39°.

YourMockTest.com — Free Study Material

**Q68. Answer: (a) 2/21**

Given:

$9a^2 + 4b^2 + 49c^2 + 18 = 2(2b + 28c – 3a)$

Concept used:

$(a + b)^2 = a^2 + b^2 + 2ab$

$(a - b)^2 = a^2 + b^2 - 2ab$

Calculation:

$9a^2 + 4b^2 + 49c^2 + 18 = 2(2b + 28c – 3a)$

$\Rightarrow 9a^2 + 4b^2 + 49c^2 + 18 = 4b + 56c – 6a$

$\Rightarrow 9a^2 + 6a + 1 + 4b^2 – 4b + 1 + 49c^2 – 56c + 16 = 0$

$\Rightarrow (3a + 1)^2 + (2b – 1)^2 + (7c – 4)^2 = 0$

$\Rightarrow (3a + 1) = (2b – 1) = (7c – 4) = 0$

$\Rightarrow (3a + 1) = 0, (2b – 1) = 0, (7c – 4) = 0$

$\Rightarrow a = - 1/3, b = 1/2, c = 4/7$

According to the question,

$(a + 2b - c) = (-1/3 + 2 \times 1/2 - 4/7)$

$\Rightarrow [(-7 + 21 - 12)/21]$

$\Rightarrow 2/21$

Therefore Required answer is 2/21

**Q69. Answer: (b) 46**

Given:

AQ = 6.5 cm, PC = 7.5 cm and BR = 9 cm

Concept used:

If from any external point two tangents are drawn on the circle, they are equal in length.

Calculation:

From point A,

AQ = AR = 6.5 cm

From point B,

BR = BP = 9 cm

From point C,

CP = CQ = 7.5 cm

Perimeter = AQ + QR + CP + PB + BR + AR

$\Rightarrow 6.5 + 7.5 + 7.5 + 9 + 9 + 6.5 = 46$ cm

Therefore Perimeter of the triangle is 46 cm

**Q70. Answer: (b) 12,000**

Given:

A saves Rs. 4000

B saves Rs. 3500

Calculation:

Let income of A and B be 7x and 5x

Let expense of A be 2y

Expenditure of B = y

According to the question

$7x – 2y = 4000$ ---- (1)

$5x – y = 3500$ ---- (2)

Multiply by 2 in equation (2)

$10x – 2y = 7000$ ---- (3)

Subtract equation (1) from (3)

$\Rightarrow x = 1000$

Total income of A and B = $7x + 5x = 12x = 12 \times 1000 = 12000$

YourMockTest.com — Free Study Material

Therefore Total income of A and B is Rs. 12000

**Q71. Answer: (a) 2**

Given:

$9x^2 - 6x + 1 = 0$

Concept used:

$(a)^3 + (1/a)^3 = (a + 1/a)^3 - 3(a + 1/a)$

Calculation:

$9x^2 - 6x + 1 = 0$

=> 9x - 6 + 1/x = 0 [Multiplied with1/x]

=> 9x + 1/x = 6

=> 3x + 1/3x = 2 [Multiplied with1/3]

$=> (3x)^3 + (1/3x)^3 = 8 – 3 \times 2$

$=> 27x^3 + 1/27x^3 = 2$

=> 27x³ + (27x³)^(-1) = 2

Therefore Required answer is 2

**Q72. Answer: (c) 47.5**

Given:

Average of 18 numbers = 42

Average of last 10 = 40

Average of first 5 = 44

Concept used:

Average = Sum of elements/Number of elements

Calculation:

Total of 18 numbers = 18 × 42 = 756

Total of last 10 numbers = 40 × 10 = 400

Total of first 5 numbers = 44 × 5 = 220

Total of 6th, 7th and 8th = 756 – 400 – 220 = 136

Let 7^(th) number be x

So, 6^(th) number be x + 6

8^(th) number be x + 7

According to the question,

=> x + x + 6 + x + 7 = 136

=> 3x = 123

=> x = 41

6^(th) number = 47

8^(th) number = 48

Average = (47 + 48)/2 = 47.5

Therefore The required answer is 47.5

**Q73. Answer: (d) 34.38**

Given:

A's income is 40% less than B

Calculation:

Let the income of B be Rs. 100

Then, income of A = 40% less than B = 60

A's new income = 75

B’s new income = 140

Total of New income = 140 + 75 = 215

Original income = 100 + 60 = 160

increase in income = 215 - 160 = 55

% increase in income = 55/160

YourMockTest.com — Free Study Material

=> 34.38% (Approx)

Therefore Required answer is 34.38%

**Q74. Answer: (a) 936 cm³**

Given:

Dimensions of rectangular sheet = 32 cm × 18 cm.

Concept used:

Volume of a cuboid = l × b × h

Calculation:

If square of side 3 cm is cut off from corners.

Height of box = 3 cm

Length of box = 32 – 6 = 26 cm

Breadth of box = 18 – 6 = 12 cm

So volume of the box = 936 cm³

Therefore The volume of the box is 936 cm³

**Q75. Answer: (d) May**

Calculation:

In January target = 60

Actual was = 70

=> (10/60) × 100 = 16.67%

In February target = 30

Actual was = 50

=> (20/30) × 100 = 66.67%

In March target = 80

Actual was = 100

=> (20/80) × 100 = 25%

In May target = 100

Actual was = 120

=> (20/100) × 100 = 20%

Therefore In May month the actual production of ACs 20% more than its target production

**Q76. Answer: (c) Sesamum**

The correct answer is Sesamum.

Key Points

• Seasame is a Rabi crop in South India.

• It is a flowering plant in the genus Sesamum and in India, it is smaller in numbers.

• Another species of Sesamum is S. Indicum.

• Sesamum is also known as Benne.

• The mustard plant is a plant species in the genera Brassica and Sinapis in the family Brassicaceae.

Additional Information

• Finger millet (Ragi)

• Millet is a collective term referring to a number of small-seeded annual grasses that are cultivated as grain crops, primarily on marginal lands in dry areas in temperate, subtropical, and tropical regions.

• Some of the common millets available in India are Ragi (Finger millet), Jowar (Sorghum), Sama (Little millet), Bajra (Pearl millet), and Variga (Proso millet).

• Barley

• Barley is cultivated as a rabi season crop in Rajasthan.

• It is sown in October-December and harvested from March to May.

• Wheat

• It is a Rabi crop generally sown between October & November harvested between April & May.

YourMockTest.com — Free Study Material

**Q77. Answer: (a) Chiktan**

The correct answer is Chiktan.

Key Points

• In Kargil, Ladakh, Khelo India Ice Hockey Tournament is being organized at Chiktan from 6 January 2021.

• For the first time, the women team of Chiktan also participated in the Khelo India Games in the Kargil district.

• There are 13 teams from different villages of Chiktan participating in the tournament, which include 11 men's teams and 2 women's teams.

Additional Information

• The first Khelo India Ice Hockey Championship 2020 trophy men's section was lifted by Ladakh Scout Regimental Centre (LSRC) Red team.

• They beat ITBP by 3-2 goals at NDS New Ice Hockey Rink on 9 Feb 2020.

• The tournament had started on 30 Jan 2020.

• A total of 13 teams participated in the first-ever Khelo India Ice Hockey Championship.

**Q78. Answer: (c) centrally sponsored schemes**

The correct answer is Centrally sponsored schemes.

Key Points

• As per Union Budget 2021, 9% of the government revenue will be spent on a Centrally sponsored scheme.

• Recently, the Minister of Finance presented the Union Budget 2021-22. This was the first-ever digital Union Budget.

• It is based on six pillars-

• Health and well-being.

• Physical and Financial capital and Infrastructure.

• Inclusive Development for Aspirational India.

• Reinvigorating Human capital.

• Innovation and R&D.

• Minimum Government, Maximum Governance.

Important Points

• Father of Indian Budget - P. C. Mahalanobis.

• Current Union Finance Minister - Nirmala Sitaraman.

• Article 112 - Annual Financial Statement.

• The Union Finance Minister to present the maximum number of budgets - Moraji Desai (10 times).

• The first budget of the Republic of India was presented by John Mathai on 28th February 1950.

Additional Information

• The Constitution refers to the Budget as the 'Annual Financial Statement'.

• The budget is laid before Parliament in the name of the President.

• The central ministry decided to merge the General Budget and the Railway Budget on 21st September 2016.

• The General Budget has a total of 109 demands (103 for civil expenditure and 6 for defence expenditure).

• The Railway Budget has 32 demands. The Union Finance Minister presents the Union Budget every year in the Parliament that contains the Government of India revenue and expenditure for one fiscal year which begins on 1st April and ends on 31st March of the following year.

• India's first Union Budget was presented by the first Finance minister, RK Shanmukham Chetty on November 26, 1947.

• Former Prime Minister Indira Gandhi was the first Indian woman Finance minister to have presented the budget in her capacity as the Prime Minister of India in 1978.

• C. D. Deshmukh was India's first Governor of RBI to have presented the interim Budget for the year (1951-1952).

• The budget of 1973-1974 is known as the 'Black Budget' due to the budget deficit.

• Stages of Enacting the budget

• Presentation of the budget.

• General discussion.

• Scrutiny by departmentally related standing committees.

• Voting on demands for grants.

• Passing of Appropriation Bill (Article 114).

• Passing of Finance Bill.

YourMockTest.com - Free Study Material

**Q79. Answer: (d) six**

The correct answer is six.

• A Shadava Raga has only six notes in its scale.

• Shadava is one that has only six swaras in its scale.

Additional Information

• Audava: one which has only five swaras in its scale.

• Swarantara: one which has only four or three swaras in its scale.

• Sampoorna shadava: one which has all swaras in its ascending and only six in its descending.

• Shadava sampoorna: one which has only six swaras in its ascending and all swaras in its descending.

• Sampoorna Audava: one which has all the swaras in its ascending and only five swaras in its descending.

• Audava sampoorna: one which has only five swaras in its ascending and all the swaras in its descending.

**Q80. Answer: (b) Talasari**

The correct answer is Talasari.

Key Points

• Talasari beach was not awarded the international ‘Blue Flag’ certification by the Foundation of Environment Education, Denmark as of October 2020.

Additional Information

• The Blue Flag programme is operated under the auspices of the Foundation for Environmental Education.

• It is headquartered in Copenhagen, Denmark.

• India becomes the first nation to be awarded Blue Flag certification for 10 beaches in a single attempt.

• 10 of India's beaches including Shivrajpur (Dwarka-Gujarat), Ghoghla (Diu), Kasarkod and Padubidri (Karnataka), Kappad (Kerala), Rushikonda (AP), Golden Beach (Odisha), Radhanagar (A&N Islands), Kovalam in Tamil Nadu and Eden in Puducherry beaches have received this award.

• Blue Flag is an iconic voluntary award for beaches, marinas, and sustainable boating.

• It is awarded to those that meet and maintain the criteria of a series of stringent environmental, educational, safety, and accessibility.

**Q81. Answer: (c) Manipur**

The correct answer is Manipur.

Key Points

• Keibul Lamjao National Park is located in Manipur.

• It is World's only 'floating' sanctuary.

• Famous for:

• Sangai: Endemic and endangered subspecies of brow-antlered deer.

• Phumdis: Floating islands.

• Nearby lake: Loktak lake.

Important Points

• Keibul Lamjao National Park:

• The Keibul Lamjao National Park is a national park in the Bishnupur district of the state of Manipur.

• The only floating national park of its kind in the world, Keibul Lamjao National Park is a singular wetland ecosystem located on Loktak Lake.

• The Keibul Lamjao, the only floating national park in the world, is home to the last of the brow-antlered deer (Rucervus eldii eldii), one of the most endangered deer in the world.

• The rare sangai or dancing deer can be spotted here with relative ease.

• Besides, you can also see hog deer, wild boar, large Indian civet, jungle cat and otter, along with several migratory birds, which arrive here between the months of November and March as well as waterfowls.

• The national park is characterized by many floating decomposed plant materials locally called phumdis.

• To preserve the natural refuge of the endangered Manipur Eld's deer or brow-antlered deer (Cervus eldi eldi), or sangai also called the dancing deer, listed as an endangered species by IUCN, the park which was initially declared to be a sanctuary in 1966, was subsequently declared to be a national park in 1977 through a gazette notification.

YourMockTest.com — Free Study Material

**Q82. Answer: (c) Alan Burgess**

The correct answer is Alan Burgess.

Key Points

• Alan Burgess was a former New Zealand cricketer and as well as was a World War II veteran.

• He played first-class cricket for Canterbury from 1940 to 1952.

• During World War II, he served as a tank driver.

• He joined the New Zealand Army in 1941.

• In 1944, he took part in the Battle of Monte Cassino.

• He toured England with the New Zealand Services team as a batsman after the war in Europe finished.

Additional Information

• Alan Burgess:

• He was the world's oldest living first-class cricketer.

• He passed away in January 2021.

• When Tom Pritchard died in August 2017, Alan Burgess became New Zealand's oldest living first-class cricketer.

• Burgess became the oldest living first-class cricketer on June 13, 2020, when Vasant Raiji died.

• Following Burgess' death, Raghunath Chandorkar of India became the world's oldest living first-class cricketer, while Iain Gallaway of New Zealand became the world's oldest living first-class cricketer.

**Q83. Answer: (b) Rigveda**

The correct answer is Rigveda.

Key Points

• ‘Purusha Sukta’ is a hymn from Rigveda.

• In the 10th Mandala of the Rigveda, Purusha Sukta outlines the origin of the four varnas (Brahmana, Kshatriya, Vaishya, Shudra) from different parts of Purusha’s body.

Additional Information

• About Rig Veda:

• Rig Veda was said to be composed between 1500-1200 B.C, also known as the first testament of mankind.

• It is a collection of 10,600 verses and 1,028 hymns.

• It consists of 10 books also known as mandalas, each Mandal consists of Suktas.

• It consists of various secrets about the origin of the universe, the origin of Lord Shiva, the origin of Lord Varuna, etc.

**Q84. Answer: (d) Bangladesh**

The correct answer is Bangladesh.

Key Points

• Bangladesh was the country in focus at the 51st International Film Festival of India held in Goa in January 2021.

• 51st International Film Festival of India (IFF) has announced a line-up of programs that will be showcased on the Over-the-top (OTT) platform.

• The festival was held in Goa from 16th to 24th January 2021.

• The Country in Focus is a special segment that recognizes the cinematic excellence and contributions of the country.

Additional Information

• Bangladesh:

• Capital - Dhaka.

• Currency - Bangladeshi Taka.

• President - Abdul Hamid.

• Prime Minister - Sheikh Hasina. (Feb 2022)

• National Sport - Kabaddi.

**Q85. Answer: (b) Bodhchandra Singh**

The correct answer is Bodhchandra Singh.

Key Points

• On 11th August 1947, the Maharaja of Manipur, Bodhachandra Singh, signed the Instrument of Accession with the Government of India.

• Under this agreement, Manipur became a member of the Constituent Assembly of India and the power of defense and external affairs and communication for the State was given to India.

• The rest of the power was with the state but on the lines of shared sovereignty.

Additional Information

• Kuki-Zo and Naga are the major tribes of the state.

• The capital of the state is Imphal.

• The Chief Minister of the state is N. Biren Singh and the governor is Najma Heptulla. (May 2020).

• Keibul Lamjao National Park is in Manipur.

**Q86. Answer: (a) 70%**

The correct answer is 70%.

Key Points

• Public Sector Banks account for about 70% of the market share in Indian banking as per the Economic Survey 2019-20.

• Public sector banks:

• Government has a major holding.

• They are divided into two groups i.e. Nationalized Banks and State Bank of India and its associates.

• Among them, there are 19 nationalized banks and 8 State Bank of India associates. Public Sector Banks dominate 75% of deposits and 71% of advances in the banking industry.

• Public Sector Banks dominate commercial banking in India.

• These can be further classified into:-

• State Bank Group.

• Nationalized banks.

• Regional Rural Banks

• Hence, A non-performing asset (NPA) refers to a loan for which the interest payment remained overdue for a period of 90 days. The public sector's bank's gross Non Performing Assets as of March 31, 2016, are of the order of Rs. 5.3 lakh crore.

**Q87. Answer: (a) 1024**

The correct answer is 1024.

Key Points

• 1 Petabyte = 1024 Terabytes.

• The units of Computer Memory Measurements are:

• 1 Bit = Binary Digit.

• 8 Bits = 1 Byte.

• 1024 Bytes = 1 KB (KiloByte).

• 1024 KB = 1 MB (MegaByte).

• 1024 MB = 1 GB (Giga Byte).

• 1024 GB = 1 TB (TeraByte).

• 1024 TB = 1 PB (Petabyte).

• 1024 PB = 1 EB (Exa Byte).

• Geop byte is the highest memory measurement unit.

Confusion PointsIf the options contain 1000TB instead of 1024TB, then it is also a correct answer. As per computer theories and virtual memory, 1024TB is the correct answer, but according to the computer storage concepts, 1000TB is the correct answer.

**Q88. Answer: (c) Buta Singh**

The correct answer is Buta Singh.

Key Points

• Buta Singh the Home Minister of India in Rajiv Gandhi's cabinet from 1986 to 1989.

• Senior Rajasthan Congress leader and former MP from Jalore, Buta Singh passed away in January 2021.

• A four-time MP from Jalore-Sirohi Lok Sabha constituency.

• He also served as the National President of Scheduled Caste Commission.

**Q89. Answer: (c) Magadha**

The correct answer is Magadha.

Key Points

• The first empire in ancient India to use elephants in its war on a large scale is Magadha.

• The evidence proved that the war elephant was invented in the later Vedic period.

YourMockTest.com — Free Study Material

• The interstate warfare under the process of unification of the kingdom Magadha.

• Magadha's success in unifying northern India's warring states is dependent on the success of the elephant war.

**Q90. Answer: (c) Kala-azar**

The correct answer is Kala-azar.

Key Points

• The disease Kala-Azar is caused by the protozoan Leishmania donovani.

• Leishmania donovani:

• It is a parasitic protozoan belonging to the class Mastigophora or flagellata.

• It is a human parasite that is dimorphic (i.e. shows two forms) & digenetic in nature

• It causes the disease Kala-azar or Dumdum fever by sand fly (phelobotomus).

• The disease is spread by the bite of an infected sandfly.

• It can affect the Skin (Cutaneous Leishmaniasis), the mucous membrane of the mouth, throat, and nose (Mucocutaneous Leishmaniasis), Liver, lymph nodes, spleen, and bone marrow (Visceral Leishmaniasis)

• Symptoms include Cutaneous Leishmaniasis - Skin ulcers.

• Mucocutaneous Leishmaniasis - Ulcers in mouth, throat, and nose, Nosebleed, Difficulty in breathing.

• Visceral Leishmaniasis - Weakness, weight loss, loss of appetite, enlarged spleen, liver, lymph nodes, a decrease in the production of blood cells.

Additional Information

• Diagram showing the two different forms of Leishmania donovani:

**Q91. Answer: (d) Infantry School, Mhow**

The correct answer is Infantry School, Mhow.

Key Points

• Defence Research and Development Organisation (DRDO) has developed the country's first indigenous machine pistol ASMI in collaboration with Infantry School, Mhow.

• The pistol is set to replace the 9mm pistols in the defence forces.

• The machine pistol can fire at a range of 100 metres and is in the class of the Uzi series guns of Israel.

• The prototype has fired over 300 rounds in the last four months of its development.

Important Points

• About the weapon-

• It has been developed by a young officer from Infantry School Lt Col Prasad Bansod.

• It was developed in a record time of four months.

• It has the capability of firing the in-service 9 mm ammunition.

• It has been named "Asmi" which means 'pride', 'Self-Respect', and "Hard Work'.

• The Armament Research and Development Establishment (ARDE) of DRDO, in Pune, has designed and developed the weapon.

Additional Information

• The Defence Research and Development Organisation (DRDO) is an agency under the Department of Defence Research and Development in the Ministry of Defence of the Government of India.

• Founded-1958.

• Headquarters-DRDO Bhavan, New Delhi.

• Chairman-Samir V Kamat

• Minister of Defence-Rajnath Singh (as of Jan 2021).

• Constituency-Lucknow.

**Q92. Answer: (b) Srinagar**

The correct answer is Srinagar.

Key Points

• Charar-i-Sharief (Chrar-e-Sharif/Charari Shareef) is a town and a notified area committee in Budgam district in the Indian union territory of Jammu and Kashmir.

• It is considered one of the most sacrosanct Muslim shrines in Kashmir.

Additional Information

• Some important Sufi shrines of India are:

• Ajmer Sharif:

• It is a Sufi shrine and one of the most visited places in Ajmer (Rajasthan). The pious Persian Sufi saint, Khwaja Moinuddin Chishti who is well-known for its secular preaching is enshrined here.

• It is believed that a person who prays with a pure heart at the Ajmer Sharif Dargah, gets all his or her wishes fulfilled.

• Many Muslims believe that Moinuddin Chisti was Muhammad's direct descendant and it was on his request (Muhammad came to his dream) he went to India. He reached Ajmer in 1192 via Lahore and stayed there till his death in 1236 AD.

• Salim Chishti:

• The tomb of Salim Chishti is located within the Friday Mosque complex at Fatehpur Sikri, which is located at the southern end of the Fatehpur Sikri palace complex in Agra.

• It occupies a prominent position within the mosque courtyard, facing its main entrance, the Buland Darwaza.

• Baba Farid:

• The tomb of Baba Farid is a popular tourist attraction point in Faridabad (Haryana).

• The tomb or the shrine was built by Mughals after the death of Baba Farid in 1265 A.D.

• It is made up of white marble having two gateways, facing east and north, called Nuri Darwaza and Bahishti Darwaza respectively.

• Hazrat Nizamuddin:

• Hazrat Nizamuddin Dargah is the Dargah (mausoleum) of one of the world's most famous Sufi saints, Hazrat Khwaja Syed Nizamuddin Auliya (1238 - 1325 CE).

• It is situated in the Hazrat Nizamuddin West area of Delhi, the Dargah is visited by thousands of Muslims every week, and sees a fair share of Hindus, Christians, and people from other religions.

**Q93. Answer: (b) Nikolai Snesarev**

The correct answer is Nikolai Snesarev.

Key Points

• The government has approved the appointment of Belarussian coach Nikolai Snesarev as the middle and long-distance coach of the Indian athletics team.

Additional Information

• The Athletics Federation of India is the apex body for running and managing athletics in India.

• The headquarters is located in New Delhi.

• The Athletics Federation of India nominated star javelin thrower Neeraj Chopra for the Rajiv Gandhi Khel Ratna Award, the country's highest sporting honour.

• Adille Sumariwalla was elected as Athletics Federation of India (AFI) president for a third term.

• While former Indian athlete Anju Bobby George was elected as the senior vice-president.

• Madhukant Pathak and Ravinder Chaudhary were elected as treasurer and general secretary of AFI respectively.

**Q94. Answer: (c) Article 48**

The correct answer is Article 48.

Key Points

• Article 48: It states to organize agriculture and animal husbandry on modern and scientific lines.

• Article 48 of the Constitution of India is one of the Directive Principles of state policy which says that:-

• The State shall endeavour to organize agriculture and animal husbandry on modern and scientific lines.

• In particular, the State shall take steps for preserving and improving the breeds and prohibiting the slaughter, of cows and calves and other milch and draught cattle.

• Article 48 is included as a “Directive Principle of State Policy", meant to guide the Indian states in policy formation and its implementation, but could not be enforced in any court.

Additional Information

• Article 84:

• It describes the qualification to become a member of the Parliament which consists of the President, the Lok Sabha, and the Rajya Sabha.

• Qualification to become a member of either house of the Parliament:

• He must be a citizen of India.

• He must make and subscribe to an oath of confirmation.

• He must not be less than 25 years of age in the case of Lok Sabha and 30 years in the case of Rajya Sabha.

• He must also possess other qualifications as prescribed by the Parliament.

• Article 29:

• Article 29 of the Indian constitution provides:

• Any section of the citizens residing in the territory of India or any part thereof having a distinct language, script or culture of its own shall have the right to conserve the same.

• No citizen shall be denied admission into any educational institution maintained by the State or receiving aid out of State funds on grounds only of religion, race, caste, language or any of them.

• Article 92:

• It States about the chairman or the deputy chairman no to preside while a resolution for his removal from the office is under consideration in the parliament.

**Q95. Answer: (c) e-Sampada**

The correct answer is E-Sampada.

Key Points

• Hardeep S Puri launched E-Sampada, a web portal and mobile app on Good Governance Day in December 2020.

• The Ministry of Housing and Urban Affairs on December 25, 2020, launched a new web portal and mobile app, E Sampada to boost transparency and accountability while ensuring ease of living for the citizens of India.

• The website and mobile app were inaugurated by Hardeep S. Puri, Minister of Housing and Urban Affairs on the birth anniversary of former PM Atal Bihari Vajpayee on December 25. Which is celebrated annually as Good Governance Day.

• E-Sampada has been developed by the government to simplify the process and for bringing uniformity in the systems across India.

• It will promote the ease of living for the Indian government's officers/departments as all the services can be easily availed online on a single window with live tracking of applications.

• Through e-Sampada, the real-time information on the delivery of service and utilization of assets will facilitate the maximum utilization of resources.

• The automated processes under it will lead to greater transparency and will minimize human intervention.

Additional Information

• e-Uparjan:

• It is the computerization of the food grain procurement system in Madhya Pradesh.

• e-Rozgar:

• It is training the youth in freelancing and digital skills so that they don't have to look for jobs but can pitch on International freelancing platforms like Fiverr, Upwork, and PeoplePerHour and earn handsome income through freelancing.

• e-Dharti:

• Union Housing and Urban Affairs Minister Hardeep Singh Puri has launched the 'e-Dharti Geo Portal'.

• It will integrate legacy drawings such as maps and lease plans in the management information system and make its geographic information system (GIS)-enabled. This measure will benefit the general public, particularly the elderly.

**Q96. Answer: (d) mass**

The correct answer is Mass.

Key Points

• Mass is a measure of inertia of the object, for an object, its inertia would depend on its mass.

• Inertia is the property of an object by virtue of which it opposes any event that attempts to put the object in motion or to change its velocity.

• Therefore, an object at rest would want to continue staying at rest and an object in motion would have a tendency to continue its motion.

• Greater the mass of the object will be the tendency to resist the events.

• Hence, mass is a measure of the inertia of the object.

Additional Information

• Newton's first law of motion states that "An object at rest stays at rest and an object in motion stays in motion with the same speed and in the same direction unless acted upon by an unbalanced force." Objects tend to "keep on doing what they're doing." In fact, it is the natural tendency of objects to resist changes in their state of motion. This tendency to resist changes in their state of motion is described as inertia.

• Inertia:

• The resistance an object has to a change in its state of motion.

• All objects resist changes in their state of motion. All objects have this tendency - they have inertia.

• Volume: Volume is a scalar quantity expressing the amount of three-dimensional space enclosed by a closed surface.

• Speed: It is defined as the ratio of distance over time.

**Q97. Answer: (c) Sandalwood**

The correct answer is Sandalwood.

Key Points

• Sandalwood is the main species of moist deciduous forests.

• Tropical Moist Deciduous Forest:

• Present in the areas having rainfall between 100-200cm.

• Found in eastern slopes of the Western Ghats, foothills of the Himalayas in the North-eastern States, and Odisha.

• Main Species of Tropical Moist Deciduous Forests: Teak, Sal, Sheshum, amla, Kusum, Mahua, Sandalwood, etc.

Additional Information

• Tropical Deciduous Forests:

• These are the most widespread forests out of all the types of forests in India.

• Also, called Monsoon Forests.

• They are found in regions having rainfall between 70-200cm.

• Tropical Deciduous Forests are further classified into two types of forests on the basis of rainfall- Tropical Moist Deciduous Forests and Tropical Dry Deciduous Forests.

• Tropical Dry Deciduous Forests:

• Found in the areas having rainfall between 70-100cm.

• Present in rainier areas of the peninsula and the plains of Uttar Pradesh and Bihar.

• During Dry seasons, Trees shed their leaves completely and the forest appears like a Grassland.

• Main species of Tropical Dry Deciduous Forests: Khair, Tendu, Palas, axle wood, bel, etc.

**Q98. Answer: (d) William Harvey**

The correct answer is William Harvey.

Key Points

• William Harvey was the first person to correctly describe blood circulation in the body.

• He showed that arteries and veins form a complete circuit. The circuit starts at the heart and leads back to the heart.

Additional Information

• William Harvey was an English physician and anatomist. In 1628, he discovered the circulation of the blood.

• This finding is a landmark in medical history that marked the beginning of modern physiology.

• His findings on blood circulation were published in De Motu Cordis et Sanguinis (On the Motions of the Heart and Blood.)

• He is also known for his studies in the field of embryology.

• Harvey was one of the first scientists to use quantitative methods in biological research.

• His view of the heart as a pump helped established a way of thinking that contributed much to science.

**Q99. Answer: (b) Haryali**

The correct answer is Haryali.

Key Points

• Hariyali is a watershed development and management program implemented by the central and state governments.

• The project is being implemented at the Grama Panchayat level with people's participation.

• The main objectives of the Hariyali program are:

• Harvesting every drop of rainwater for purposes of irrigation, plantations to create sustainable sources of income for the village community as well as for drinking water supplies.

• Overall development of rural areas by creating regular sources of income for the Panchayat from rainwater harvesting and management.

• Employment generation and poverty alleviation in rural areas.

• All the district level, ZP/DRDA shall be the nodal authority for the implementation of all the area development programs under the supervision and guidance of the State Government and the Government of India.

• A meeting of the Gram Sabha/ Ward Sabha shall be convened for the preparation of the Action Plan/Watershed Treatment Plan.

Additional Information

• The Gram Panchayat shall maintain a separate account for the watershed project and all receipts from ZP/DRDA will be credited to this account.

• The Gram Panchayat shall constitute Self Help Groups (SHGs) in the watershed area.

• Neeru-Meeru is a programme in Andhra Pradesh was taken up constructions of various water harvesting structures dug out

YourMockTest.com — Free Study Material

ponds, check dams through people participation.

• Arvary Pani Sansad programme is associated with Rajasthan.

**Q100. Answer: (c) MS-DOS**

The correct answer is MS-DOS.

Key Points

• An operating system that allows a single user to perform only one task at a time is called a Single-User Single-Tasking Operating System.

• Functions like printing a document, downloading images, etc., can be performed only one at a time. Examples include MS-DOS, Palm OS, etc.

• Advantage:

• This operating system occupies less space in memory.

• Disadvantage:

• It can perform only a single task at a time.

Additional Information

• There are four types of operating systems -

• Real-time operating system.

• Single-User/Single-Tasking operating system.

• Single-User/Multitasking operating system.

• Multi-User/Multitasking operating system.

• A real-time operating system is designed to run real-time applications. It can be both single- and multi-tasking. Examples include Abbasi, AMX RTOS, etc.

• An operating system that allows a single user to perform more than one task at a time is called Single-User Multitasking Operating System.

• Examples include Microsoft Windows and Macintosh OS.

• It is an operating system that permits several users to utilize the programs that are concurrently running on a single network server. The single network server is termed as "Terminal server". "Terminal client" is software that supports user sessions. Examples include UNIX, MVS, etc.

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

YourMockTest.com — Free Study Material