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TEST FORM NUMBER

INSTRUCTIONS TO CANDIDATE

Maximum Marks : 50
Total Questions : 50
Time Allowed : 45 Min.

Read the following instructions carefully before you begin to attempt the questions.

(1) This booklet contains 50 questions in all comprising the following two parts.

- **Part-(I) : English**   **(20 Questions)**
- **Part-(II) : RAGA**   **(30 Questions)**

(2) All the questions are compulsory and carry equal marks.

(3) Before you start to attempt the questions, you must explore this booklet and ensure that it contains all the pages and find that no page is missing or replaced. If you find any flaw in this booklet, you must get it replaced immediately.

(4) **There is no negative marking.**

(5) You will be supplied the Answer-sheet separately by the invigilator. You must complete the details of Name, Roll number, Test name/Id and name of the examination on the Answer-Sheet carefully before you actually start attempting the questions. You must also put your signature on the Answer-Sheet at the prescribed place. These instructions must be fully complied with, failing which, your Answer-Sheet will not be evaluated and you will be awarded 'ZERO' mark.

(6) Answer must be shown by completely blackening the corresponding circles on the Answer-Sheet against the relevant question number by **pencil or Black/Blue ball pen** only.

(7) A machine will read the coded information in the OMR Answer-Sheet. In case the information is incompletely/ different from the information given in the application form, the candidature of such candidate will be treated as cancelled.

(8) The Answer-Sheet must be handed over to the Invigilator before you leave the Examination Hall.

(9) Failure to comply with any of the above Instructions will make a candidate liable to such action/penalty as may be deemed fit.

(10) Answer the questions as quickly and as carefully as you can. Some questions may be difficult and others easy. Do not spend too much time on any question.

(11) Mobile phones and wireless communication device are completely banned in the examination halls/rooms. Candidates are advised not to keep mobile phones/any other wireless communication devices with them even switching it off, in their own interest. Failing to comply with this provision will be considered as using unfair means in the examination and action will be taken against them including cancellation of their candidature.

(12) No rough work is to be done on the Answer-Sheet.

(13) No candidate can leave the examination hall before completion of the exam.

NAME OF CANDIDATE:..
DATE :......................... CENTRE CODE :.................
ROLL No :...

DO NOT OPEN THIS TEST BOOKLET UNTIL YOU ARE TOLD TO DO SO

# ENGLISH

1. Choose the most appropriate answer and fill in the blanks:
   How _____ oranges do you put in the box?
   (A) Much   (B) Most
   (C) Many   (D) More

2. Choose the most appropriate answer and fill in the blanks:
   You will not succeed_____ you work hard.
   (A) If   (B) While
   (C) When   (D) Unless

3. Choose the most appropriate answer and fill in the blanks:
   Adjective form of 'Friend' will be_____.
   (A) Friendship   (B) Friendly
   (C) Befriend   (D) Friendhood

4. Choose the most appropriate answer and fill in the blanks:
   Each of the students _____ participating in the examination.
   (A) was   (B) were
   (C) has   (D) have

5. Identify the part of speech of the underlined word.
   He is young looking but an <u>insipid</u> young man.
   (A) Noun   (B) Adverb
   (C) Adjective   (D) Verb

6. Rewrite the sentences given below using different degrees of comparison.
   Shakespeare is the most famous of all writers in English.
   (A) Shakespeare is greater than any others writer in English.
   (B) No other writer in English is as famous than Shakespeare.
   (C) No other writer in English is more famous as Shakespeare.
   (D) Shakespeare is greater than any other writer in English.

7. Choose the option to fill the blank space correctly.
   There is plenty of time .... the train for us.
   (A) to get   (B) to catch
   (C) to hold   (D) to reach

8. Rearrange the sentence correctly.
   is aimed at (1) in by turncoats (2) the Anti-defection bill (3) checking the evil practice indulged (4)
   (A) 3142   (B) 3124
   (C) 1234   (D) 4321

9. Rearrange the sentence correctly.
   by his good batting (1) turns the table (2) on the opposite team (3) a batsman often (4)
   (A) 4213   (B) 4231
   (C) 4132   (D) 4321

10. Change the narration.
    Ram said to me "He had committed a mistake."
    (A) Ram said to me that he had committed a mistake.
    (B) Ram told me that he had been committed a mistake.
    (C) Ram told to me that he had committed a mistake.
    (D) Ram told me that he had committed a mistake.

11. Change the voice.
    We have completed our task before sunset.
    (A) Our task had been completed before sunset.
    (B) Our task has been completed before sunset.
    (C) Our task was completed before sunset.
    (D) Our task is completed before sunset.

12. Choose the correctly spelt word.
    (A) liesone   (B) liazone
    (C) lieison   (D) liaison

13. Choose the option the expresses the meaning of the given Idiom.
    Yeomen service
    (A) Service for a short period
    (B) Very costly service
    (C) Useful service in need
    (D) Work without preparation

14. Choose the word that expresses the opposite meaning of the given word.
    WEARY
    (A) Apathy   (B) Falsity
    (C) Refreshed   (D) Crude

15. Choose the word that best expresses the meaning of the given word.
    CURTAIL
    (A) Downsize   (B) Lengthen
    (C) Prolong   (D) Extend

16. Select the word which means the same as the group of words given.
    Protection or of authority over someone.
    (A) Autonomous   (B) Tutelage
    (C) Nonaligned   (D) Unaided

Direction (17-20): Read the passage given below and answer the questions that follow:

Chandrayaan-1 was India's first mission to the moon. It operated for almost a year (between October 2008 and August 2009). The lunar orbiter is best known for helping to discover evidence of water molecules on the moon. The name Chandrayaan means "Moon Craft" in ancient Sanskrit, according to NASA. The Chandrayaan-1 spacecraft was based on an Indian meteorological satellite called Kalpansat. It was about the size of a refrigerator, with a dry weight (weight without fuel) of about 525 kilograms (1,160 lbs.) and was powered by a solar array that charged lithium-ion batteries on board.
Chandrayaan-1 launched on Oct,22,2008, from the Satish Dhawan Space Center in Sriharikota, India, aboard a Polar Satellite Launch Vehicle rocket, according to NASA. It reached the moon on Nov. 8, 2008. The spacecraft released its Moon Impact Probe on Nov. 14, which crashed into the moon on the same day.

17. What crashed into the moon?
    (A) Satish Dhawan Space Center
    (B) Polar Satellite Launch Vehicle rocket
    (C) Moon Craft
    (D) Moon Impact Probe

18. When the Chandrayaan-1 reached the moon?
    (A) on Nov. 8, 2009   (B) on Nov. 8, 2008
    (C) on Nov. 9, 2008   (D) on dec. 8, 2008

19. From where the Chandrayaan-1 was launched?
    (A) from the Satish Dhawan optical Center
    (B) from the Satish Tiwari Space Center
    (C) from the Satish Dhawan Space Center
   (D) from the Sushant Dhawan Space Center

20. What was the purpose of Chandrayaan-1?
(A) to discover evidence of water molecules on the moon.
(B) to discover gases molecule on the moon surface.
(C) to discover mountains on the moon.
**(D)** to discover air molecules on the moon surface.

RAGA

21. Which of the following countries will host the World Leaders Conference to Combat Anti-Semitism in October 2020?
(A) Denmark　　　　　　**(B)** Norway
(C) Belgium　　　　　　**(D)** Sweden

22. In which state is 'Tarnetar' fair celebrated annually?
(A) Gujrat　　　　　　**(B)** Manipur
(C) Madhya Pradesh　　**(D)** Telangana

23. According to Article 243 V of the Constitution of India, the minimum age requirement for becoming a member of a Municipalty is _____.
(A) 32 years　　　　　**(B)** 21years
(C) 28years　　　　　**(D)** 24years

24. The Bacille Calmette-Guerin vaccine (popularly called BCG vaccine) is a vaccine to prevent which of these diseases?
(A) Tuberculosis　　　**(B)** Typhoid
(C) Polio　　　　　　**(D)** Jaundice

25. Which among the following oceans is "S-shaped"?
(A) Pacific Ocean　　**(B)** Atlantic Ocean
(C) Arctic Ocean　　**(D)** Indian Ocean

26. Who among the following is the author of the book- "Train to Pakistan"?
(A) Khushwant Singh　**(B)** Shashi Tharoor
(C) Manmohan Singh　**(D)** Jhumpa Lahiri

27. Who among the following was the Chairman of the Union Powers Committee of Constituent Assembly?
(A) B R Ambedkar　　**(B)** J.B Kriplani
(C) K M Munshi　　　**(D)** Jawaharlal Nehru

28. Identify the diagram that best represents the relationship among the given classes.
Hardware, Mouse, Chrome

(A)　　**(B)**　　**(C)**　　**(D)**
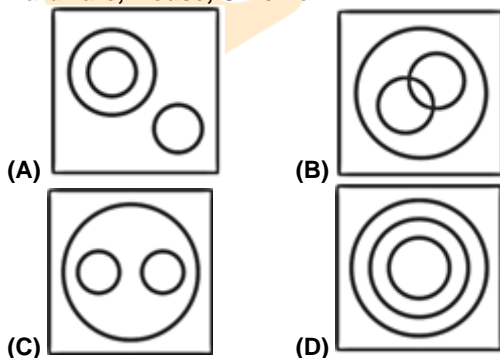
29. Arrange the following words in a meaningful logical sequence and choose the appropriate number sequence from the alternatives.
1. Fairy　　　　　**2.** Camel
3. Desert　　　　**4.** Elephant
5. Blink
(A) 1, 2, 3, 4, 5　　**(B)** 5, 2, 3, 1, 4
(C) 1, 4, 3, 2, 5　　**(D)** 5, 3, 1, 4, 2

30. Select the figure that will come next in the following figure series.

(A)　　**(B)**　　**(C)**　　**(D)**
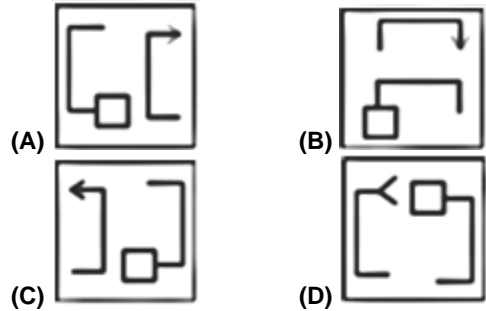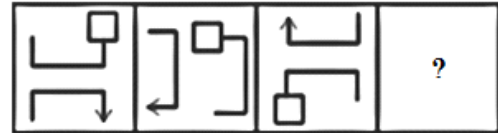
31. Select the Venn diagram that best illustrates the relationship between the following classes.
Moon, Venus, Universe

(A)　　**(B)**　　**(C)**　　**(D)**
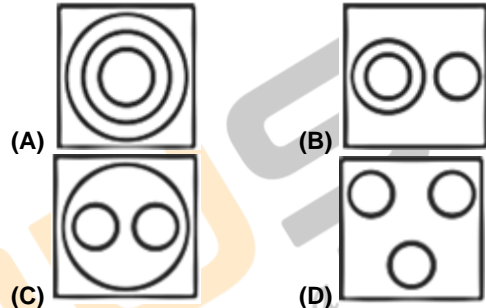
32. Arrange the following words in a logical and meaningful order.
1. Cloud　　　　　**2.** Rainbow
3. Devastation　　**4.** Rain
5. Low Pressure　　**6.** Flood
(A) 1, 5, 4, 2, 6, 3　**(B)** 5, 1, 4, 2, 6, 3
(C) 5, 4, 1, 2, 3, 6　**(D)** 5, 1, 2, 4, 6, 3

33. In a certain coded language, 'FARMER' is written as '713823' and 'LIBRARY' is written as '6453139'. How is 'REMEMBER' written in that code language?
**(A)** 32828253　　　**(B)** 32825823
(C) 32828523　　　**(D)** 32288523

34. In the following question, select the missing number from the series.

| 32	72	12
4	8	3
8	9	?

(A) 8　　　　　　**(B)** 5
(C) 4　　　　　　**(D)** 7

35. If two signs, '+ and ÷' are interchanged, which of the following equation will be correct?
(A) $16 \div 9 + 4 \times 8 = 34$　**(B)** $16 \div 21 + 13 \times 26 = 56$
(C) $13 \times 9 + 16 \div 2 = 125$　**(D)** $11 + 13 \times 4 \div 2 = 37$

36. A series is given with one term missing. Choose the correct alternative from the given ones that will complete the series.
9　-7　-16　-20　?
(A) 21　　　　　**(B)** -21
(C) -23　　　　**(D)** -26

37. Select the related word/letters/number from the given alternatives.
Finland: Euro:: Libya: ?
(A) Dirham　　　**(B)** Dinar
(C) Rial　　　　**(D)** Dollar

**38.** In a certain code language, 'MANDARIN' is written as '%@#$@&*#'. How is 'DRAMA' written in that code language?
(A) %&@%@　　　　(B) $&@%*
(C) $&@%@　　　　(D) $*@%#

39. If × means added to, ÷ means multiplied by , + means subtracted from and – means divided by. Then
24+36-12×8÷4 =?
(A) 36　　　　(B) 53
(C) 5　　　　(D) -20

40. Find the radius of cylinder whose curved surface area is 627 sq. cm. (Take height = 11 cm and π = 3)
(A) 7　　　　(B) 14
(C) 10.5　　　　(D) 9.5

41. Find Sin A + Sec A, if $\tan^2 A = 25/144$
(A) 229/156　　　　(B) 263/156
(C) 29/60　　　　(D) 165/124

42. The perimeter of a semicircle is 72 cm. Find the area of the circle.
(A) 154　　　　(B) 616
(C) 346.5　　　　(D) None of these

43. When an article is sold for Rs. 176.7 the loss is 7%. If a profit of 15% is to be earned on selling this article, find its selling price?
(A) 199.5　　　　(B) 218.5
(C) 207.5　　　　(D) 225.4

44. In a school, girls constitute 55% of total strength. If the average mark obtained by all girls in the class is 63.5 and average marks of school (boys and girls combined) are 50. Find the average marks obtained by boys?
(A) 46　　　　(B) 35.5
(C) 32.5　　　　(D) 33.5

45. Choose the image that will come next in the series.
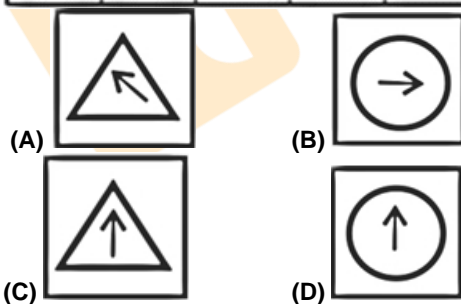
46. Choose the image that will come next in the series.
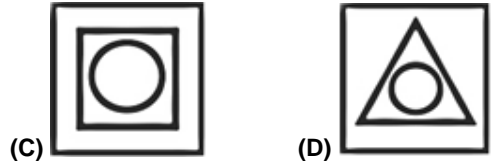
47. Choose the image that will come next in the series.
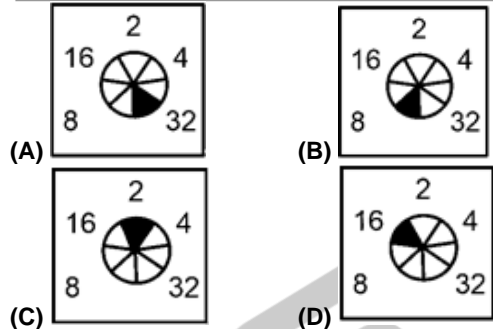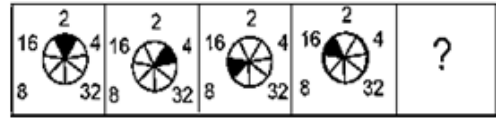
48. A train running at 58 km/hr is trying to overtake a train running at 49 km/hr. Faster train overtakes the slower train in 3 minutes. If train with faster speed is shorter than the other train by 10 m. Find the length of longer train?
(A) 210 m　　　　(B) 220 m
(C) 230 m　　　　(D) 240 m

49. In a ΔABC, the bisectors of ∠B and ∠C meet at point O, inside the triangle. If ∠BOC = 122°, then the measure of ∠A is:
(A) 72°　　　　(B) 64°
(C) 62°　　　　(D) 68°

50. What is the second smallest number which upon dividing by 3, 5, 7 and 11 leaves a remainder of 2 in each case?
(A) 2310　　　　(B) 2312
(C) 2314　　　　(D) 2316

ENGLISH

Ans.1(C) The correct answer is option C i.e. Many.
Many + plural Noun.
As 'oranges' in the sentence is plural. Many will suit the blank space grammatically and contextually.
So the chosen option is correct.

Ans.2(D) The correct answer is option D i.e. Unless.
As the first sentence is negative and the other is positive we have to choose the connector according to it.
According to options only Unless will fit the context because this shows both conditions and contradictions.
So, this will be the right answer.

Ans.3(B) The correct answer is option B i.e. Friendly.
Whenever we add 'ly' with a noun it becomes Adjective.
As Friend is a noun so "Friend + Ly- Friendly" will be an adjective.

Ans.4(A) The correct answer is option A i.e. was.
Each of + plural noun + singular verb .
According to this rule, we have to choose Was as our answer because it is singular.
"Has/have + v3" so this can not be the right answer.

Ans.5(C) The correct answer is option C i.e. adjective.
insipid- (adjective) lacking flavor; weak or tasteless.

Ans.6(D) The correct answer is option D i.e. Shakespeare is greater than any other writer in English.
The first option will be wrong because - "any + other" is correct.
In the second option it should be - as famous as.
In the third option, it should be - as famous as.
The fourth option has all the agreement so it will be correct.

Ans.7(A) The correct answer is option A i.e. to get.
'To get' is used for the train.so the chosen option is correct.

Ans.8(A) The correct answer is option A i.e. 3142.
The best of solving this section is forming pairs.
The first pair will be "Anti-defection bill is" because a subject needs the verb.
The second pair will be " indulged in " means 42.
The correct arrangement will be- 3142
The Anti-defection bill is aimed at checking the evil practice indulged in by turn coats.

Ans.9(B) The correct answer is option B i.e. 4231.
The best of solving this section is forming pairs.
The first pair will be "batsman often turns" because a subject needs the verb.
The second pair will be "opposite team by his" means 31.
The correct arrangement will be- 4231
A batsman often turns the table on the opposite team by his good batting.

Ans.10(D) The correct answer is option D i.e. Ram told me that he had committed a mistake.
If the reported speech is in past perfect tense we don't change the tense of the statement.
said should be changed into- told.
That should be used as a conjunction.

Ans.11(B) The correct answer is option B i.e. Our task has been completed before sunset.
if the active voice is - subject + has/have + v3 + object + other word.
Passive voice will be- object + have/has+ been + v3 + by + subject.
As the chosen option follows the given rule it will be correct.

Ans.12(D) The correct answer is option D i.e. liaison.
liaison- communication or cooperation which facilitates a close working relationship between people or organizations.

Ans.13(C) The correct answer is option C i.e. useful service in need.
The meaning of the given idiom is-
Yeomen service- useful service in need.

Ans.14(C) The correct answer is option C i.e. refreshed.
weary-feeling or showing extreme tiredness, especially as a result of excessive exertion.
refreshed-having regained strength or energy.
crude-in a natural or raw state; not yet processed or refined.
As the chosen word express the opposite meaning of the given word it will be correct.

Ans.15(A) The correct answer is option A i.e. Downsize.
curtail-reduce in extent or quantity; impose a restriction on.
downsize-make (something) smaller.
prolong-continuing for a long time or longer than usual; lengthy.
extend-cause to cover a wider area; make larger.
lengthen-make or become longer.
As the chosen word expresses the best meaning it will be the correct answer.

Ans.16(B) The correct answer is option B i.e. tutelage.
autonomous-(of a country or region) having the freedom to govern itself or control its own affairs.
tutelage-protection of or authority over someone or something; guardianship.
nonaligned-not aligned with something else.
unaided-needing or having no assistance; without help.
As the chosen option has the same meaning as the given group of words it will be correct.

Ans.17(D) The correct answer is option D i.e. Moon Impact Probe.
As it is clearly mentioned in the passage that The spacecraft released its Moon Impact Probe on Nov. 14, which crashed into the moon on the same day.

Ans.18(B) The correct answer is option B i.e. on Nov. 8, 2008.
As it is clearly mentioned in the passage that It reached the moon on Nov. 8, 2008.

Ans.19(C) The correct answer is option C i.e from the Satish Dhawan Space Center.
As it is clearly mentioned in the passage that Chandrayaan-1 launched on Oct,22,2008, from the Satish Dhawan Space Center in Sriharikota.

Ans.20(A) The correct answer is option A i.e. to discover evidence of water molecules on the moon.
As it is clearly mentioned in the passage that The lunar orbiter is best known for helping to discover evidence of water molecules on the moon.

RAGA

Ans.21(D)

Which of the following countries will host the World Leaders Conference to Combat Anti-Semitism in October 2020?	**Sweden**
World Leaders Conference to Combat Anti-Semitism 2020:	• Swedish Prime Minister Stefan Lofven announced that Sweden will host an International Conference against Anti-Semitism in memory of the Holocaust in October 2020. • It will be held in Malmo, Southern Sweden, on October 27 and 28.
Sweden:	• Capital: Stockholm • Currency: Swedish krona • Points of interest: Gamla stan, Vasa Museum, The Royal Palace etc. • Official language: Swedish

Ans.22(A)

In which state is 'Tarnetar' fair celebrated annually?	**Gujarat**
'Tarnetar' fair:	• Tarnetar is known for its annual fair, the Trinetreshwar Mahadev Mela, which is held near the Trinetreshwar Mahadev temple. • It attracts villagers from all over the region as well as tourists. • Around 100,000 people typically attend.
Gujarat	Capital: Gandhinagar CM: Vijay Rupani Governor: Acharya Devvrat

Ans.23(B)

According to Article 243 V of the Constitution of India, the minimum age requirement for becoming a member of a Municipalty is ____.	21 years
Article 243 V of the Constitution of India:	• Article 243 V describes disqualification criteria of age requirement for becoming a member of a Municipality. • A member is disqualified to be chosen as a member of the municipality if he/she is disqualified under any law to be elected as MLA. • The minimum age to be qualified as a member is 21 years.

Ans.24(A)

The Bacille Calmette-Guerin vaccine (popularly called BCG vaccine) is a vaccine to prevent which of these diseases?	Tuberculosis
Bacille Calmette-Guerin vaccine (BCG):	• The BCG vaccine contains live bacteria that have been weakened (attenuated) so that they stimulate the immune system but do not cause disease in healthy people. • BCG is used in many countries with a high prevalence of TB. • In countries where tuberculosis or leprosy is common, one dose is recommended in healthy babies as close to the time of birth as possible.

Ans.25(B)

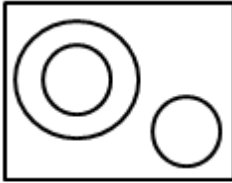| Ocean	Shape	Other information
Pacific	Irregular Triangle	Largest ocean and deepest trench- Mariana Trench lies here
Atlantic	S- shaped	It is one-fifth of Earth's surface and separates the continents of Europe and Africa to the east from those of North and South America to the west.
Arctic	Roughly circular	It is the smallest and the coldest ocean
Indian	Roughly circular	It is the third largest ocean and Ocean borders Asia, Africa, Australia and the Southern Ocean (Antarctica).

Ans.26(A)

Author	Books
Khushwant Singh	⇒ Train to Pakistan ⇒ The Sunset Club ⇒ The Company of Women

Shashi Tharoor	⇒ An Era of Darkness ⇒ Why I Am A Hindu ⇒ The Paradoxical Prime Minister ⇒ India From Midnight to the Millennium
Manmohan Singh	⇒ Changing India ⇒ The Quest for Equity in Development ⇒ Collateral and Monetary Policy ⇒ Collateral and Financial Plumbing
Jhumpa Lahiri	⇒ Unaccustomed Earth ⇒ The Namesake ⇒ Interpreter of Maladies

Ans.27(D) ⇒ The Constituent Assembly of India adopted the Constitution of India on 26 November 1949.

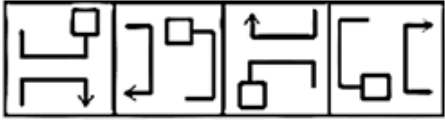| Name of the Committee	Chairman
Drafting Committee	B R Ambedkar
Fundamental Rights Sub-Committee	J.B Kriplani
Order of Business Committee	K M Munshi
Union Powers Committee	**Jawaharlal Nehru**

Ans.28(A)

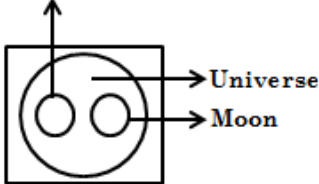| Concept	Understanding	Application
Venn diagram		As Mouse is a part of Hardware but chrome is a part of Software so option 1 is correct.

Ans.29(C) The correct answer is option 3 i.e. 1, 4, 3, 2, 5

Concept	Understanding
Dictionary	The words are arranged in reverse dictionary order.

Ans.30(A)

Concept	Application
Pattern: The shape with pointed arrow is moving clockwise by 90 degree in each step while other one is moving anticlockwise by 90 degree in each step.	Following this pattern, figure in option 1 will be the next figure.

Ans.31(C)

Concept	Understanding	Application
Venn diagram		Moon and Venus are the part of Universe only.

Ans.32(B)

Concept	Understanding	Application
The complete process of Rain and Flood.	Low pressure creates Cloud then Rain occurs then Rainbow can be seen and then if the Rain is in major amount, it brings flood and then devastation.	The logical order is- 5. Low pressure 1. Cloud 4. Rain 2. Rainbow 6. Flood 3. Devastation

Ans.33(C)

Concept	Understanding	Application
Coding Decoding	The letters in the words are coded as the letters in the word given FARMER' is written as '713823 We can see that F=7, A = 1, R =3, M = 8, E = 2 Similarly, LIBRARY' is written as '6453139 We can see that L = 6, I = 4, B = 5, R = 3, A =1, Y = 9 We will change all the letters in the word REMEMBER with the coded numbers given above	Hence, REMEMBER is coded as 32828523

Ans.34(C)

Concept	Understanding
Missing number	The pattern followed here is, The number in [Row 3, Column 1] = The quotient of 32÷4 = 8 The number in [Row 3, Column 2] = The quotient of 72÷8 = 9 The number in [Row 3, Column 3] = The quotient of 12÷3 = 4

Ans.35(A)   The correct answer is option 1 i.e. 16 ÷ 9 + 4 × 8 = 34

Concept	Application
BODMAS	16 + 9 ÷ 4 × 8 = 34 34 = 34

Ans.36(B)

Concept	Understanding	Application
Series – Missing term	The pattern followed here is, $9 - 4^2 = -7$ $-7 - 3^2 = -16$ $-16 - 2^2 = -20$	Hence, Next term = $-20 - 1^2 = -21$

Ans.37(B)

Concept	Understanding	Application
Country – Currency	As, we know Euro is a currency of Finland, Dirham is the currency of United Arab Emirates, Rial is the currency of Iran and Dollar is the currency of many countries like Australia, USA, Canada etc.	Similarly, Dinar is the currency of Libya

Ans.38(C)

Concept	Understanding	Application
Coding decoding	MANDARIN' is written as '%@#$@&*# Hence M=%, A= @, D= $, R=&	The code for 'DRAMA' would be '$&@%@'.

Ans.39(B)

Concept	Understanding	Application
BODMAS	× means added to, ÷ means multiplied by , + means subtracted from and – means divided by	24+36-12×8÷4 After converting to actual symbols 24-36÷12+8×4 = 24-3+8×4 = 24-3+32 = 53

Ans.40(D)

Concept	Application
Curved surface area of cylinder = 2 × π × r × h	Curved surface area of cylinder = 2 × π × r × h = 627 2 × 3 × r × 11 = 627 r = 9.5 cm

Ans.41(A)

Concept	Understanding	Application
Tan A = 5/12 = P/B	Given, $\tan^2 A = 25/144$ Tan A = 5/12 = P/B $P^2 + B^2 = H^2$ $25 + 144 = H^2$ $H^2 = 169$ H = 13	Sin A = P/H = 5/13 Sec A = H/B = 13/12 Sin A + Sec A = 5/13 + 13/12 = 229/156

Ans.42(B)

Concept	Application
Perimeter of semicircle = Diameter + Half of circumference	72 = 2r + πr 72 = r (2+22/7) (72 × 7)/36 = r r = 14 cm Area of circle = (22/7) × 14 × 14 = 616

Ans.43(B)

Understanding	Application
The selling price of article = Rs 176.7 Loss% = 7% Let the cost price be x	According to question, (100 - 7)% of x = 176.7 93% of x = 176.7 x = (176.7 × 100)/93 = 190 Selling price when 15% profit is required = (100 + 15)% of 190 = (115/100) × 190 = Rs 218.5

Ans.44(D)

Concept	Understanding	Application	Fair calculation
Logic Used: The question does not give a specific number of girls and boys, so we can assume any value in the said ratio in question and proceed.	Percentage of boys in school = (100-55) = 45% Ratio of girls and boys = 55:45 = 11:9 Let there be 11 girls and 9 boys in school.	If average weight of boys is a kg, then, $11 \times 63.5 + a \times 9 = 50 \times (11+9)$ $698.5 + 9a = 1000$ $9a = 301.5$ $a = 33.5$	$50 \times (11 + 9)$ = 1000

Ans.45(A)

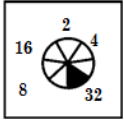| Concept	Understanding
Image Series	The logic followed here is: 1) In first two steps, figure having 5 sides is present, in next two steps figure having 4 sides is present, thus in next two steps figure having 3 sides ahould be present. 2) The arrow moves 90 degrees in the clockwise direction at each step. Folloeing this logic, the next image should be

Ans.46(A)

Concept	Understanding
Image Series	The logic followed here is: 1) The size of the circle is increasing at each step 2) The square is inside and outside the circle respectively at alternate steps Folloeing this logic, the next image should be

Ans.47(A)

Concept	Understanding
Image Series	The logic followed here is: The spin wheel is rotating and the marker stops on numbers followinh the order - 2, 4, 8, 16, 32 Folloeing this logic, the next image should be

Ans.48(C) Speed of faster train = 58 km/hr
Speed of slower train = 49 km/hr
Relative speed (same direction) = 58 - 49 = 9 km/hr = 9 × (5/18) = 2.5 m/s
Time = 3 minutes = 3 × 60 = 180 seconds.
Distance travelled = Sum of lengths of both trains = Relative speed × time
Let length of trains be x and x + 10.
x + x + 10 = 2.5 × 180
2x + 10 = 450
2x = 440
x = 220
Length of longer train = x + 10 = 220 + 10 = 230 m

Ans.49(B)

Concept	Understanding	Application	Fair calculation
In case of angle bisector, ∠BOC = 90° + (∠A/2)	Given ∠BOC = 122°	122 = 90 + (A/2) A = 64°	(122 – 90) × 2 = 64°

Ans.50(B) Smallest number divisible by 3, 5, 7 and 11 = LCM (3, 5, 7, 11)
⇒ 3 × 5 × 7 × 11 = 1155
Second smallest number = 2 × 1155 = 2310
To leave a remainder of 2, the number should be = 2310 + 2 = 2312

TESMUS
...keeps you ahead

<table>
<tr><td>TEST FORM NUMBER</td><td rowspan="2">INSTRUCTIONS TO CANDIDATE</td><td>अधिकतम अंक : 50</td></tr>
<tr><td>कुल प्रश्न : 50</td></tr>
<tr><td></td><td></td><td>निर्धारित समय : 45 मिनट</td></tr>
</table>

प्रश्नों को हल करने से पहले निम्नलिखित निर्देशों को ध्यान से पढ़ें।

(1) इस पुस्तिका में 50 प्रश्न हैं, जो कि कुल दो भागों में विभाजित हैं।

भाग- **(I)** : ENGLISH   **(20 प्रश्न)**

भाग- **(II)** : RAGA   **(30 प्रश्न)**

(2) सभी प्रश्न अनिवार्य हैं तथा सबके बराबर अंक हैं।

(3) प्रश्नों को हल करना प्रारम्भ करने से पहले आपको इस पुस्तिका की जांच करनी चाहिए और यह सुनिश्चित करना चाहिए कि इसमें सभी पृष्ठ उपस्थित हैं और कोई पृष्ठ कम या बदला हुआ नहीं है। अगर आपको इस पुस्तिका में कोई दोष मिलता है, तो आपको तुरंत इसे बदलना होगा।

(4) **किसी प्रश्न में नकरात्मक अंकन नहीं है।**

(5) आपको निरीक्षक द्वारा उत्तर पुस्तिका अलग से दी जाएगी। आपको प्रश्नों को हल करना प्रारम्भ करने से पहले अपना नाम, रोल नंबर, टेस्ट नाम / आईडी और / परीक्षा का नाम उत्तर–पुस्तिका पर सावधानीपूर्वक पूरा करना होगा। आपको उत्तर–पुस्तिका में निर्धारित स्थान पर अपना हस्ताक्षर भी करना होगा। इन निर्देशों का पूरी तरह से पालन किया जाना चाहिए, जिसको न करने पर आपकी उत्तर–पुस्तिका का मूल्यांकन नहीं किया जाएगा और आपको 'शून्य' अंक दिया जाएगा।

(6) उत्तर केवल **पेंसिल या ब्लैक/ब्लू बॉल पेन** द्वारा उत्तर– पुस्तिका प्रासंगिक प्रश्न संख्या के सम्बंधित गोले को पूरी तरह से ब्लैक करके दिखाया जाना चाहिए।

(7) OMR उत्तर पुस्तिका को एक मशीन द्वारा जांचा जायेगा। यदि किसी स्थिति में उपलब्ध जानकारी, आवेदन पत्र में दी गयी जानकारी से अलग पायी गयी, तो आवेदक का आवेदन निरस्त कर दिया जायेगा।

(8) निरीक्षक की अनुमति मिलने के बाद ही कोई परीक्षा कक्ष छोड़ सकता है।

(9) उपरोक्त में से किसी भी निर्देश का अनुपालन करने में विफल उम्मीदवार को उपयुक्त कार्यवाही/जुर्माना के लिए उत्तरदायी समझा जा सकता है।

(10) जितनी जल्दी हो सके उतनी जल्दी और सावधानी से प्रश्नों का उत्तर दें। कुछ सवाल कठिन हो सकते हैं और दूसरे आसान हो सकते हैं। किसी भी प्रश्न पर ज्यादा समय नहीं बिताएं।

(11) मोबाइल फोन और वायरलेस संचार उपकरण, परीक्षा कक्ष/कमरे में पूरी तरह से प्रतिबंधित हैं। कोई भी आवेदक अपने मोबाइल का या किसी वायरलेस संचार उपकरण को बंद करके भी अपने पास नहीं रख सकता। नियम का उल्लंघन करने पर आवेदक के विरूद्ध उचित कार्यवाही की जायेगी और उसका आवेदन भी निरस्त किया जा सकता है।

(12) उत्तर–पत्र पर कोई रफ काम नहीं किया जाना चाहिए।

(13) कोई भी उम्मीदवार परीक्षा पूरा होने से पहले परीक्षा कक्ष नहीं छोड़ सकता है।

परीक्षार्थी का नाम :..

दिनाँक :.................. परीक्षा कोड ....

अनुक्रमांक :..

जब तक आपको यह परीक्षण पुस्तिका खोलने को न कहा जाए तब तक न खोलें

ENGLISH

1. Choose the most appropriate answer and fill in the blanks:
   How _____ oranges do you put in the box?
   (A) Much **(B)** Most
   (C) Many **(D)** More

2. Choose the most appropriate answer and fill in the blanks:
   You will not succeed_____ you work hard.
   (A) If **(B)** While
   (C) When **(D)** Unless

3. Choose the most appropriate answer and fill in the blanks:
   Adjective form of 'Friend' will be_____.
   (A) Friendship **(B)** Friendly
   (C) Befriend **(D)** Friendhood

4. Choose the most appropriate answer and fill in the blanks:
   Each of the students _____ participating in the examination.
   (A) was **(B)** were
   (C) has **(D)** have

5. Identify the part of speech of the underlined word.
   He is young looking but an <u>insipid</u> young man.
   (A) Noun **(B)** Adverb
   (C) Adjective **(D)** Verb

6. Rewrite the sentences given below using different degrees of comparison.
   Shakespeare is the most famous of all writers in English.
   (A) Shakespeare is greater than any others writer in English.
   (B) No other writer in English is as famous than Shakespeare.
   (C) No other writer in English is more famous as Shakespeare.
   (D) Shakespeare is greater than any other writer in English.

7. Choose the option to fill the blank space correctly.
   There is plenty of time .... the train for us.
   (A) to get **(B)** to catch
   (C) to hold **(D)** to reach

8. Rearrange the sentence correctly.
   is aimed at **(1)** in by turncoats **(2)** the Anti-defection bill **(3)** checking the evil practice indulged **(4)**
   (A) 3142 **(B)** 3124
   (C) 1234 **(D)** 4321

9. Rearrange the sentence correctly.
   by his good batting **(1)** turns the table **(2)** on the opposite team **(3)** a batsman often **(4)**
   (A) 4213 **(B)** 4231
   (C) 4132 **(D)** 4321

10. Change the narration.
    Ram said to me "He had committed a mistake."
    (A) Ram said to me that he had committed a mistake.
    (B) Ram told me that he had been committed a mistake.
    (C) Ram told to me that he had committed a mistake.
    (D) Ram told me that he had committed a mistake.

11. Change the voice.
    We have completed our task before sunset.
    (A) Our task had been completed before sunset.
    (B) Our task has been completed before sunset.
    (C) Our task was completed before sunset.
    (D) Our task is completed before sunset.

12. Choose the correctly spelt word.
    (A) liesone **(B)** liazone
    (C) lieison **(D)** liaison

13. Choose the option the expresses the meaning of the given Idiom.
    Yeomen service
    (A) Service for a short period
    (B) Very costly service
    (C) Useful service in need
    (D) Work without preparation

14. Choose the word that expresses the opposite meaning of the given word.
    WEARY
    (A) Apathy **(B)** Falsity
    (C) Refreshed **(D)** Crude

15. Choose the word that best expresses the meaning of the given word.
    CURTAIL
    (A) Downsize **(B)** Lengthen
    (C) Prolong **(D)** Extend

16. Select the word which means the same as the group of words given.
    Protection or of authority over someone.
    (A) Autonomous **(B)** Tutelage
    (C) Nonaligned **(D)** Unaided

Direction (17-20): Read the passage given below and answer the questions that follow:

Chandrayaan-1 was India's first mission to the moon. It operated for almost a year (between October 2008 and August 2009). The lunar orbiter is best known for helping to discover evidence of water molecules on the moon. The name Chandrayaan means "Moon Craft" in ancient Sanskrit, according to NASA. The Chandrayaan-1 spacecraft was based on an Indian meteorological satellite called Kalpansat. It was about the size of a refrigerator, with a dry weight (weight without fuel) of about 525 kilograms (1,160 lbs.) and was powered by a solar array that charged lithium-ion batteries on board.
Chandrayaan-1 launched on Oct,22,2008, from the Satish Dhawan Space Center in Sriharikota, India, aboard a Polar Satellite Launch Vehicle rocket, according to NASA. It reached the moon on Nov. 8, 2008. The spacecraft released its Moon Impact Probe on Nov. 14, which crashed into the moon on the same day.

17. What crashed into the moon?
    (A) Satish Dhawan Space Center
    (B) Polar Satellite Launch Vehicle rocket
    (C) Moon Craft
    (D) Moon Impact Probe

18. When the Chandrayaan-1 reached the moon?
    (A) on Nov. 8, 2009 **(B)** on Nov. 8, 2008
    (C) on Nov. 9, 2008 **(D)** on dec. 8, 2008

19. From where the Chandrayaan-1 was launched?
    (A) from the Satish Dhawan optical Center
    (B) from the Satish Tiwari Space Center
    (C) from the Satish Dhawan Space Center
    (D) from the Sushant Dhawan Space Center

20. What was the purpose of Chandrayaan-1?
(A) to discover evidence of water molecules on the moon.
(B) to discover gases molecule on the moon surface.
(C) to discover mountains on the moon.
**(D)** to discover air molecules on the moon surface.

RAGA

21. निम्नलिखित में से कौन सा देश अक्टूबर 2020 में यहूदी विरोधी भावना का मुकाबला करने के लिए विश्व नेताओं के सम्मेलन की मेजबानी करेगा?
(A) डेनमार्क   **(B)** नॉर्वे
(C) बेल्जियम   **(D)** स्वीडन

22. 'तारणेतर'मेला किस राज्य में प्रतिवर्ष मनाया जाता है?
(A) गुजरात   **(B)** मणिपुर
(C) मध्य प्रदेश   **(D)** तेलंगाना

23. भारत के संविधान के अनुच्छेद 243 V के अनुसार, नगरपालिका का सदस्य बनने के लिए न्यूनतम आयु _____ है।
(A) 32 वर्ष   **(B)** 21 वर्ष
(C) 28 वर्ष   **(D)** 24 वर्ष

24. बेकल कैलमेट-गुएरिन वैक्सीन (जिसे BCG टीका कहा जाता है) इन बीमारियों में से किसको रोकने के लिए एक टीका है?
(A) क्षय   **(B)** टाइफाइड
(C) पोलियो   **(D)** पीलिया

25. निम्नलिखित में से कौन सा महासागर "S- आकार" का है?
(A) प्रशांत महासागर   **(B)** अटलांटिक महासागर
(C) आर्कटिक महासागर   **(D)** हिंद महासागर

26. निम्नलिखित में से कौन "ट्रेन टू पाकिस्तान" पुस्तक के लेखक हैं?
(A) खुशवंत सिंह   **(B)** शशि थरूर
(C) मनमोहन सिंह   **(D)** झुम्पा लाहिड़ी

27. निम्नलिखित में से कौन संविधान सभा की केंद्रीय शक्ति समिति का अध्यक्ष था?
(A) बी आर अम्बेडकर   **(B)** जे बी कृपलानी
(C) के एम मुंशी   **(D)** जवाहर लाल नेहरू

28. उस आरेख को पहचानें जो दिए गए वर्गों के बीच संबंधों का सबसे अच्छा प्रतिनिधित्व करता है।
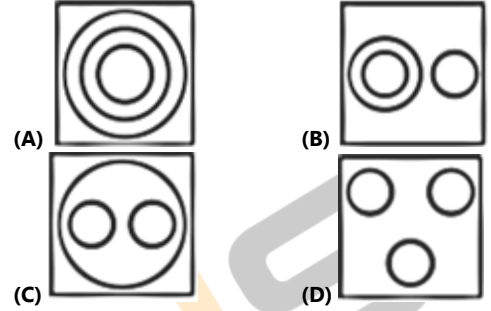हार्डवेयर, माउस, क्रोम
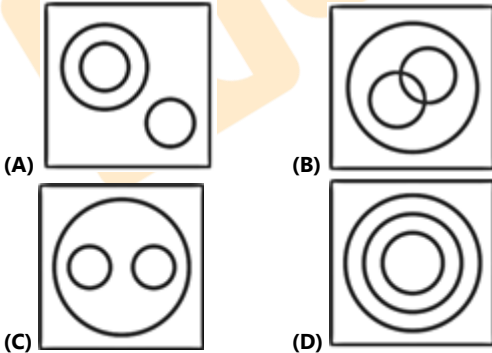
29. निम्नलिखित शब्दों को एक सार्थक तार्किक अनुक्रम में व्यवस्थित करें और विकल्पों में से उचित संख्या अनुक्रम चुनें।
1. Fairy   2. Camel
3. Desert   4. Elephant
5. Blink
(A) 1, 2, 3, 4, 5   **(B)** 5, 2, 3, 1, 4
(C) 1, 4, 3, 2, 5   **(D)** 5, 3, 1, 4, 2

30. उस आकृति का चयन कीजिए जो प्रश्न आकृति श्रृंखला में अगली आएगी।
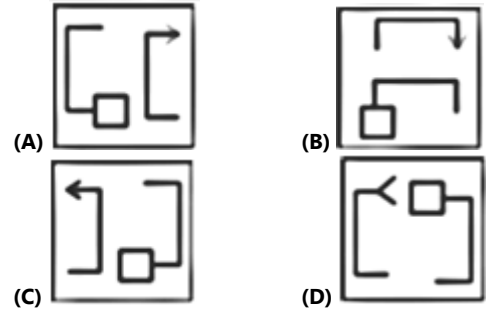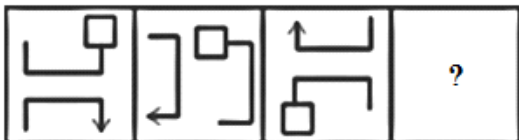
31. उस वेन आरेख का चयन कीजिए जो निम्नलिखित वर्गों के बीच के सबंध को सबसे बेहतर रूप से दर्शाता है?
चंद्रमा, शुक्र, ब्रह्मांड

32. निम्नलिखित शब्दों को तार्किक व सार्थक/अर्थपूर्ण क्रम में व्यवस्थित कीजिये।
1. बादल   2. इंद्रधनुष
3. विध्वंस   4. बारिश
5. अल्प दबाव   6. बाढ़
(A) 1, 5, 4, 2, 6, 3   **(B)** 5, 1, 4, 2, 6, 3
(C) 5, 4, 1, 2, 3, 6   **(D)** 5, 1, 4, 2, 6, 3

33. एक निश्चित कूट भाषा में, 'FARMER' को '713823' और 'LIBRARY' को '6453139' लिखा जाता है। उस कोड भाषा में REMEMBER 'कैसे लिखा जाता है?
(A) 32828253   **(B)** 32825823
(C) 32828523   **(D)** 32288523

34. निम्नलिखित प्रश्न में, श्रृंखला से लुप्त संख्या का चयन करें।

32	72	12
4	8	3
8	9	?

(A) 8   **(B)** 5
(C) 4   **(D)** 7

35. यदि दो संकेत, + और ÷ आपस में बदले जाते हैं, तो निम्नलिखित में से कौन सा समीकरण सही होगा?
(A) $16 ÷ 9 + 4 × 8 = 34$ **(B)** $16 ÷ 21 + 13 × 26 = 56$
(C) $13 × 9 + 16 ÷ 2 = 125$ **(D)** $11 + 13 × 4 ÷ 2 = 37$

36. एक श्रृंखला गुम होने के साथ दी गई है। दिए गए विकल्पों में से सही विकल्प चुनें जो श्रृंखला को पूरा करेगा।
9, -7, -16, -20, ?
(A) 21   **(B)** -21
(C) -23   **(D)** -26

37. दिए गए विकल्पों में से संबंधित शब्द / अक्षर / संख्या को चुनिए।
फिनलैंड: यूरो :: लीबिया:?
(A) दिरहम   **(B)** दीनार
(C) रियाल   **(D)** डॉलर

38. एक निश्चित कूट भाषा में, 'MANDARIN' को '%@#$@&*#' लिखा जाता है। उस कोड भाषा में 'DRAMA' कैसे लिखा जाता है?
**(A)** %&@%@   **(B)** $&@%*
(C) $&@%@   **(D)** $*@%#

39. यदि × का अर्थ जोड़ना है, ÷ का अर्थ गुणा करना है, + का अर्थ घटाना है और – का अर्थ विभाजित करना है। फिर

24 + 36-12 × 8 ÷ 4 =?
(A) 36   (B) 53
(C) 5   (D) -20

40. बेलन की त्रिज्या ज्ञात करें जिसके वक्र सतह का क्षेत्रफल 627 वर्ग सेमी है। (ऊँचाई = 11 सेमी और π = 3 लें)
(A) 7   (B) 14
(C) 10.5   (D) 9.5

41. Sin A + Sec A ज्ञात कीजिये, यदि tan2 A = 25/144 है।
(A) 229/156   (B) 263/156
(C) 29/60   (D) 165/124

42. अर्धवृत्त की परिधि 72 सेमी है। वृत्त का क्षेत्रफल ज्ञात कीजिए।
(A) 154   (B) 616
(C) 346.5   (D) इनमें से कोई नहीं

43. जब एक वस्तु को 176.7 रूपए में बेचा जाता है तो हानि 7% है। यदि इस वस्तु को बेचने पर 15% का लाभ प्राप्त करना हो तो विक्रय मूल्य ज्ञात कीजिये।
(A) 199.5   (B) 218.5
(C) 207.5   (D) 225.4

44. एक स्कूल में, लड़कियां कुल छात्रों का 55% हिस्सा हैं। यदि कक्षा में सभी लड़कियों द्वारा प्राप्त औसत अंक 63.5 है और स्कूल के औसत अंक (लड़के और लड़कियां के मिलाकर) 50 हैं। लड़कों द्वारा प्राप्त औसत अंक ज्ञात करें?
(A) 46   (B) 35.5
(C) 32.5   (D) 33.5

45. श्रृंखला में अगली आने वाली छवि चुनें।
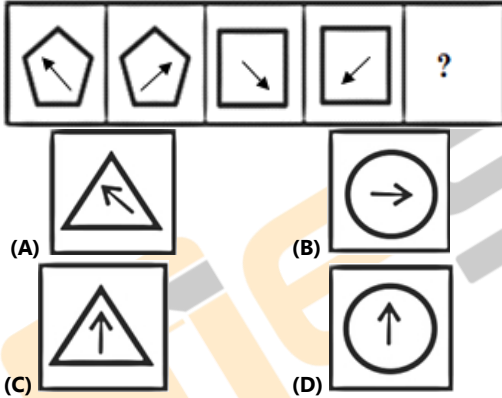
46. श्रृंखला में अगली आने वाली छवि को चुनें।
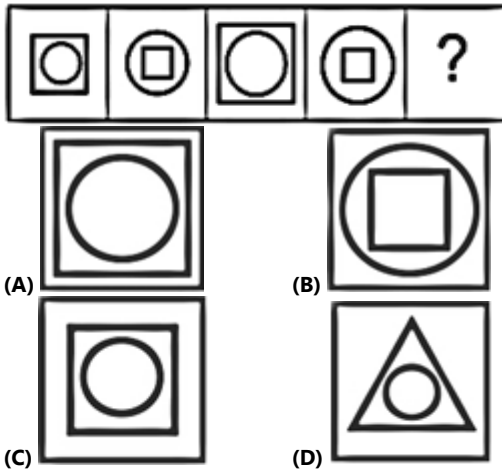
47. श्रृंखला में अगली आने वाली छवि चुनें।
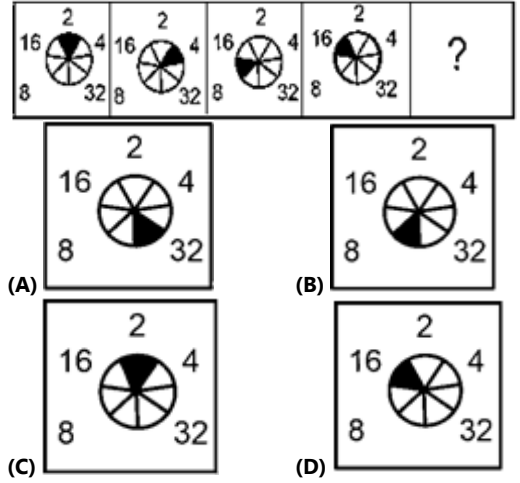
48. 58 किमी/घंटा की गति से चलने वाली एक ट्रेन 49 किमी/घंटा की गति से चलने वाली एक ट्रेन से आगे निकलने की कोशिश कर रही है। तेज़ गति वाली ट्रेन 3 मिनट में धीमी गति वाली ट्रेन से आगे निकल जाती है। यदि तेज गति वाली ट्रेन दूसरी ट्रेन की तुलना में 10 मीटर छोटी है। तो लंबी ट्रेन की लंबाई ज्ञात कीजिये?
(A) 210 मीटर   (B) 220 मीटर
(C) 230 मीटर   (D) 240 मीटर

49. एक ΔABC में, ∠B और ∠C की समद्विभाजक त्रिभुज के अन्दर बिंदु O पर मिलती हैं। यदि ∠BOC = 122° है, तब ∠A की माप है:
(A) 72°   (B) 64°
(C) 62°   (D) 68°

50. वह दूसरी सबसे छोटी संख्या कौन सी है जिसे 3, 5, 7 और 11 से विभाजित करने पर प्रत्येक स्थिति में शेष 2 बचता है?
(A) 2310   (B) 2312
(C) 2314   (D) 2316

ENGLISH

Ans.1(C) The correct answer is option C i.e. Many.
Many + plural Noun.
As 'oranges' in the sentence is plural. Many will suit the blank space grammatically and contextually.
So the chosen option is correct.

Ans.2(D) The correct answer is option D i.e. Unless.
As the first sentence is negative and the other is positive we have to choose the connector according to it.
According to options only Unless will fit the context because this shows both conditions and contradictions.
So, this will be the right answer.

Ans.3(B) The correct answer is option B i.e. Friendly.
Whenever we add 'ly' with a noun it becomes Adjective.
As Friend is a noun so "Friend + Ly- Friendly" will be an adjective.

Ans.4(A) The correct answer is option A i.e. was.
Each of + plural noun + singular verb .
According to this rule, we have to choose Was as our answer because it is singular.
"Has/have + v3" so this can not be the right answer.

Ans.5(C) The correct answer is option C i.e. adjective.
insipid- (adjective) lacking flavor; weak or tasteless.

Ans.6(D) The correct answer is option D i.e. Shakespeare is greater than any other writer in English.
The first option will be wrong because - "any + other" is correct.
In the second option it should be - as famous as.
In the third option, it should be - as famous as.
The fourth option has all the agreement so it will be correct.

Ans.7(A) The correct answer is option A i.e. to get.
'To get' is used for the train.so the chosen option is correct.

Ans.8(A) The correct answer is option A i.e. 3142.
The best of solving this section is forming pairs.
The first pair will be "Anti-defection bill is" because a subject needs the verb.
The second pair will be " indulged in " means 42.
The correct arrangement will be- 3142
The Anti-defection bill is aimed at checking the evil practice indulged in by turn coats.

Ans.9(B) The correct answer is option B i.e. 4231.
The best of solving this section is forming pairs.
The first pair will be "batsman often turns" because a subject needs the verb.
The second pair will be "opposite team by his" means 31.
The correct arrangement will be- 4231
A batsman often turns the table on the opposite team by his good batting.

Ans.10(D) The correct answer is option D i.e. Ram told me that he had committed a mistake.
If the reported speech is in past perfect tense we don't change the tense of the statement.
said should be changed into- told.
That should be used as a conjunction.

Ans.11(B) The correct answer is option B i.e. Our task has been completed before sunset.
if the active voice is - subject + has/have + v3 + object + other word.
Passive voice will be- object + have/has+ been + v3 + by + subject.
As the chosen option follows the given rule it will be correct.

Ans.12(D) The correct answer is option D i.e. liaison.
liaison- communication or cooperation which facilitates a close working relationship between people or organizations.

Ans.13(C) The correct answer is option C i.e. useful service in need.
The meaning of the given idiom is-
Yeomen service- useful service in need.

Ans.14(C) The correct answer is option C i.e. refreshed.
weary-feeling or showing extreme tiredness, especially as a result of excessive exertion.
refreshed-having regained strength or energy.
crude-in a natural or raw state; not yet processed or refined.
As the chosen word express the opposite meaning of the given word it will be correct.

Ans.15(A) The correct answer is option A i.e. Downsize.
curtail-reduce in extent or quantity; impose a restriction on.
downsize-make (something) smaller.
prolong-continuing for a long time or longer than usual; lengthy.
extend-cause to cover a wider area; make larger.
lengthen-make or become longer.
As the chosen word expresses the best meaning it will be the correct answer.

Ans.16(B) The correct answer is option B i.e. tutelage.
autonomous-(of a country or region) having the freedom to govern itself or control its own affairs.
tutelage-protection of or authority over someone or something; guardianship.
nonaligned-not aligned with something else.
unaided-needing or having no assistance; without help.
As the chosen option has the same meaning as the given group of words it will be correct.

Ans.17(D) The correct answer is option D i.e. Moon Impact Probe.
As it is clearly mentioned in the passage that The spacecraft released its Moon Impact Probe on Nov. 14, which crashed into the moon on the same day.

Ans.18(B) The correct answer is option B i.e. on Nov. 8, 2008.
As it is clearly mentioned in the passage that It reached the moon on Nov. 8, 2008.

Ans.19(C) The correct answer is option C i.e from the Satish Dhawan Space Center.
As it is clearly mentioned in the passage that Chandrayaan-1 launched on Oct,22,2008, from the Satish Dhawan Space Center in Sriharikota.

Ans.20(A) The correct answer is option A i.e. to discover evidence of water molecules on the moon.
As it is clearly mentioned in the passage that The lunar orbiter is best known for helping to discover evidence of water molecules on the moon.

RAGA

Ans.21(D)

निम्नलिखित में से कौन सा देश अक्टूबर 2020 में यहूदी विरोधी भावना का मुकाबला करने के लिए विश्व नेताओं के सम्मेलन की मेजबानी करेगा?	स्वीडन

विश्व-विरोधी सम्मेलन के संयोजन के लिए विश्व नेता सम्मेलन 2020:	⇒ स्वीडिश प्रधान मंत्री स्टीफन लोफवेन ने घोषणा की कि स्वीडन अक्टूबर 2020 में यहूदी नरसंहार की स्मृति में यहूदी-विरोधी के खिलाफ एक अंतर्राष्ट्रीय सम्मेलन की मेजबानी करेगा। ⇒ यह 27 और 28 अक्टूबर को माल्मो, दक्षिणी स्वीडन में आयोजित किया जाएगा।
स्वीडन :	⇒ राजधानी: स्टॉकहोम ⇒ राजधानी: स्टॉकहोम ⇒ पसंदीदा स्थान : गमला स्टेन, वासा संग्रहालय, द रॉयल पैलेस आदि। ⇒ आधिकारिक भाषा: स्वीडिश

Ans.22(A)

तारणेतर 'मेला किस राज्य में प्रतिवर्ष मनाया जाता है?	गुजरात
तारणेतर 'मेला	⇒ तारणेतर अपने वार्षिक मेले, त्रिनेत्रेश्वर महादेव मेले के लिए जाना जाता है, जो त्रिनेत्रेश्वर महादेव मंदिर के पास आयोजित होता है। ⇒ यह पर्यटकों के साथ-साथ पूरे क्षेत्र के ग्रामीणों को आकर्षित करता है। ⇒ लगभग 100,000 लोग आम तौर पर उपस्थित होते हैं।
गुजरात	राजधानी: गांधीनगर सीएम: विजय रूपानी राज्यपाल: आचार्य देवव्रत

Ans.23(B)

भारत के संविधान के अनुच्छेद 243 V के अनुसार, नगरपालिका का सदस्य बनने के लिए न्यूनतम आयु आवश्यकता ____ है।	21 साल
भारत के संविधान का अनुच्छेद 243 V:	⇒ अनुच्छेद 243 V एक नगर पालिका का सदस्य बनने के लिए उम्र की आवश्यकता के अयोग्यता मानदंडों का वर्णन करता है। ⇒ एक सदस्य को नगरपालिका के सदस्य के रूप में चुने जाने के लिए अयोग्य घोषित किया जाता है, यदि उसे विधायक के रूप में चुने जाने के लिए किसी कानून के तहत अयोग्य ठहराया जाता है। ⇒ सदस्य के रूप में योग्य होने के लिए न्यूनतम आयु 21 वर्ष है।

Ans.24(A)

बेकल कैलमेट-गुएरिन वैक्सीन (जिसे BCG टिका कहा जाता है) इन बीमारियों में से किसको रोकने के लिए एक टीका है?	क्षय
बेसिल कैलमेट-गुएरिन वैक्सीन (BCG):	⇒ BCG वैक्सीन में जीवित बैक्टीरिया होते हैं जिन्हें निर्बल (क्षीण) किया गया है ताकि वे प्रतिरक्षा प्रणाली को उत्तेजित करें लेकिन स्वस्थ लोगों में बीमारी का कारण न बनें। ⇒ BCG का उपयोग कई देशों में टीबी के उच्च प्रसार के साथ किया जाता है। ⇒ उन देशों में जहां तपेदिक या कुष्ठ रोग आम है, स्वस्थ शिशुओं में जन्म के समय के करीब एक खुराक की सिफारिश की जाती है।

Ans.25(B)

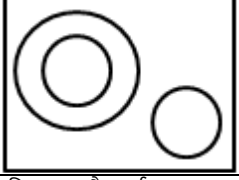| सागर	आकार	अन्य सूचना
पेसिफिक	अनियमित त्रिभुज	सबसे बड़ा महासागर और सबसे गहरी खाई- मारियाना ट्रेंच यहाँ स्थित है
अटलांटिक	S- आकार का	यह पृथ्वी की सतह का पांचवां हिस्सा है और यूरोप एवं अफ्रीका के महाद्वीपों को उत्तर और दक्षिण अमेरिका के पूर्व से पश्चिम में अलग करता है।
आर्कटिक	स्थूलत: परिपत्र	यह सबसे छोटा और सबसे ठंडा महासागर है
भारतीय	स्थूलत: परिपत्र	यह तीसरा सबसे बड़ा महासागर और महासागरीय सीमा एशिया, अफ्रीका, ऑस्ट्रेलिया और दक्षिणी महासागर (अंटार्कटिक) है।

Ans.26(A)

लेखक	पुस्तक
खुशवंत सिंह	⇒ **ट्रेन टू पाकिस्तान** ⇒ द सनसेट क्लब ⇒ द कंपनी ऑफ वूमेन
शशि थरूर	⇒ एन एरा ऑफ डार्कनेस ⇒ वाय आई एम ए हिंदू ⇒ द पैराडॉक्सिकल प्राइम मिनिस्टर ⇒ इंडिया फ्रॉम मिडनाइट टू द मिलेनियम
मनमोहन सिंह	⇒ चेंजिंग इंडिया ⇒ द केस्ट फॉर इंक्वैरी इन डैवलपमेंट ⇒ कोलेटरल एंड मोनेटरी पॉलिसी ⇒ कोलेटरल एंड फाइनेंशियल प्लमबिंग
झुम्पा लाहिड़ी	⇒ अनएकसटमड अर्थ

| | ⇒ द नेमसेक |
| | ⇒ इंटरप्रिटर ऑफ मालदीव |

Ans.27(D) ⇒ भारत की संविधान सभा ने 26 नवंबर 1949 को भारत के संविधान को अपनाया।

समिति का नाम	अध्यक्ष
मसौदा समिति	बी आर अम्बेडकर
मौलिक अधिकार उप-समिति	जे बी कृपलानी
व्यापार समिति की कार्यविधि	के एम मुंशी
केंद्रीय शक्ति समिति	**जवाहर लाल नेहरू**
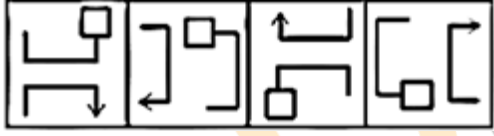
Ans.28(A)

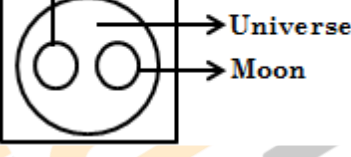| विचार	समझना	आवेदन
वेन आरेख		चूंकि माउस, हार्डवेयर एक हिस्सा है लेकिन क्रोम, सॉफ्टवेयर का एक हिस्सा है इसलिए 1 विकल्प सही है।

Ans.29(C)   सही उत्तर विकल्प 3 है अर्थात् 1, 4, 3, 2, 5

विचार	समझना
शब्दकोश	शब्दों को उल्टे शब्दकोश क्रम में व्यवस्थित किया गया है।

Ans.30(A)

विचार	आवेदन
पैटर्न: नुकीले तीर के साथ आकार प्रत्येक चरण में घड़ी की दिशा में 90 डिग्री से आगे बढ़ रहा है, जबकि अन्य प्रत्येक चरण में 90 डिग्री से घड़ी की विपरीत दिशा चल रहा है।	इस पैटर्न के बाद, विकल्प 1 अगला होगा।

Ans.31(C)

विचार	समझना	आवेदन
वेन आरेख		चंद्रमा और शुक्र केवल ब्रह्मांड का हिस्सा हैं।

Ans.32(B)

विचार	समझना	आवेदन
बारिश और बाढ़ की पूरी प्रक्रिया।	कम दबाव बादल बनाता है तब वर्षा होती है फिर इंद्रधनुष देखा जा सकता है और फिर यदि वर्षा बड़ी मात्रा में होती है, तो बाढ़ आती है और फिर तबाही होती है।	तार्किक क्रम है- 5. कम दबाव 1. मेघ 4. बारिश 2. इंद्रधनुष 6. बाढ़ 3. तबाही

Ans.33(C)   शब्दों में अक्षरों को दिए गए शब्द के अक्षरों के रूप में कोडित किया गया है
FARMER 'को 8 713823 के रूप में लिखा जाता है
हम देख सकते हैं कि F = 7, A = 1, R = 3, M = 8, E = 2
इसी तरह,
LIBRARY 'को R 6453139 लिखा जाता है
हम देख सकते हैं कि
L = 6, I = 4, B = 5, R = 3, A = 1, Y = 9
हम REMEMBER शब्द के सभी अक्षरों को ऊपर दिए गए कोडित संख्याओं के साथ बदल देंगे
इसलिए, REMEMBER को 32828523 के रूप में कोडित किया गया है

Ans.34(C)

विचार	समझना
लुप्त संख्या	[पंक्ति 3, स्तंभ 1] में संख्या = 32 ÷ 4 के भागफल में संख्या = 8 [पंक्ति 3, स्तंभ 2] में संख्या = 72 ÷ 8 के भागफल में संख्या = 9 [पंक्ति 3, स्तंभ 3] में संख्या = 12 ÷ 3 के भागफल में संख्या = 4

Ans.35(A)   सही उत्तर विकल्प 1 है यानी 16 ÷ 9 + 4 × 8 = 34
हम प्रत्येक विकल्प से जांच सकते हैं कि कौन सा विकल्प चिन्हों को बदलने पर संतुष्ट करेगा

विचार	आवेदन
BODMAS	16 + 9 ÷ 4 × 8 = 34

	34 = 34	

Ans.36(B)

विचार	समझना	आवेदन
श्रृंखला– लुप्त पद	पैटर्न यहाँ है, $9 – 4^2 = -7$ $-7 – 3^2 = -16$ $-16 – 2^2 = -20$	इसलिए, अगला पद $= -20 - 1^2 = -21$

Ans.37(B)

विचार	समझना	आवेदन
देश – मुद्रा	जैसा कि, हम जानते हैं कि यूरो फिनलैंड की मुद्रा है, दिरहम संयुक्त अरब अमीरात की मुद्रा है, रियाल ईरान की मुद्रा है और डॉलर ऑस्ट्रेलिया, अमेरिका, कनाडा आदि जैसे कई देशों की मुद्रा है।	इसी तरह, दीनार लीबिया की मुद्रा है

Ans.38(C)

विचार	समझना	आवेदन
Coding decoding	'MANDARIN' को '%@#$@&*#' लिखा जाता है इसलिए M=%, A = @, D = $, R = &	'DRAMA' का कोड '$&@%@' होगा।

Ans.39(B)

विचार	समझना	आवेदन
BODMAS	× का अर्थ जोड़ना है, ÷ का अर्थ गुणा करना है, + का अर्थ घटाना है और – का अर्थ विभाजित करना है।	$24 + 36-12 × 8 ÷ 4$ वास्तविक प्रतीकों में परिवर्तित होने के बाद $24-36-12 + 8 × 4 = 24-3 + 8 × 4 = 24-3 + 32 = 53$

Ans.40(D)

विचार	आवेदन
बेलन का वक्र सतह का क्षेत्रफल = $2 × π × r × h$	बेलन का वक्र सतह का क्षेत्रफल $= 2 × π × r × h = 627$ $2 × 3 × r × 11 = 627$ $r = 9.5$ सेमी

Ans.41(A)

विचार	समझना	आवेदन
Tan A = 5/12 = लम्ब/आधार	दिया है, $\tan^2 A = 25/144$ Tan A = 5/12 = लम्ब/आधार लम्ब^2 + आधार^2 = ऊँचाई^2 $25 + 144 = $ ऊँचाई^2 ऊँचाई$^2 = 169$ ऊँचाई $= 13$	Sin A = P/H = 5/13 Sec A = H/B = 13/12 Sin A + Sec A = 5/13 + 13/12 = 229/156

Ans.42(B)

विचार	आवेदन
अर्धवृत की परिधि = व्यास + परिधि का आधा	$72 = 2r + πr$ $72 = r (2+22/7)$ $(72 × 7)/36 = r$ $r = 14$ cm वृत्त का क्षेत्रफल $= (22/7) × 14 × 14 = 616$

Ans.43(B)

समझना	आवेदन
वस्तु का विक्रय मूल्य = 176.7 रु हानि% = 7% माना वस्तु का क्रय मूल्य x है	प्रश्न के अनुसार, x का (100 - 7)% = 176.7 x का 93% = 176.7 x = (176.7 × 100)/93 = 190 15% लाभ की आवश्यकता होने पर विक्रय मूल्य = (100 + 15)% of 190 = (115/100) × 190 = Rs 218.5

Ans.44(D)

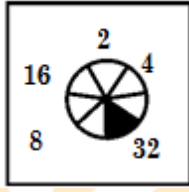| विचार	समझना	आवेदन	उचित गणना
प्रयुक्त तर्क: प्रश्न में लड़कियों और लड़कों की कोई संख्या नहीं दी गयी है, इसलिए हम किसी भी मान को दिए गए अनुपात में को मान सकते हैं और आगे हल कर सकते हैं।	स्कूल में लड़कों का प्रतिशत = (100-55) = 45% लड़कियों और लड़कों का अनुपात = 55:45 = 11: 9 माना कि स्कूल में 11 लड़कियां और 9 लड़के हैं।	यदि लड़कों का औसत वजन a किलो है, तो, $11 × 63.5 + a × 9 = 50 × (11 + 9)$ $698.5 + 9a = 1000$ $9a = 301.5$ $a = 33.5$	$50 × (11 + 9) = 1000$

Ans.45(A)

विचार	समझना
आकृति	यहाँ निम्न तर्क का पालन किया जाता है:

| श्रृंखला | 1) पहले दो चरणों में, 5 भुजाओं वाली आकृति मौजूद है, अगले दो चरणों में 4 भुजाओं वाली आकृति मौजूद है, इस प्रकार अगले दो चरणों में 3 भुजाओं वाली आकृति मौजूद है।
 2) तीर प्रत्येक चरण पर दक्षिणावर्त दिशा में 90 डिग्री पर चलता है।
 इस तर्क को ध्यान में रखते हुए, अगली छवि होनी चाहिए |

Ans.46(A)

विचार	समझना
आकृति श्रृंखला	यहाँ निम्न तर्क का पालन किया जाता है: 1) प्रत्येक चरण पर वृत्त का आकार बढ़ रहा है 2) वर्ग वैकल्पिक चरणों में क्रमशः वृत्त के अंदर और बाहर है इस तर्क को ध्यान में रखते हुए, अगली छवि होनी चाहिए

Ans.47(A)

विचार	समझना
आकृति श्रृंखला	यहाँ निम्न तर्क का पालन किया जाता है: स्पिन व्हील घूम रहा है और मार्कर क्रम में निम्न क्रमांक पर रुकता है - 2, 4, 8, 16, 32 इस तर्क को ध्यान में रखते हुए, अगली छवि होनी चाहिए

Ans.48(C) तेज गति वाली ट्रेन की गति = 58 किमी/घंटा
धीमी गति वाली ट्रेन की गति = 49 किमी/घंटा
सापेक्ष गति (एक ही दिशा) = 58 - 49 = 9 किमी/घंटा = 9 × (5/18) = 2.5 मीटर/सेकंड
समय = 3 मिनट = 3 × 60 = 180 सेकंड।
तय की गई दूरी = दोनों ट्रेनों की लंबाई का योग = सापेक्ष गति × समय
माना ट्रेनों की लंबाई x और x + 10 है।
x + x + 10 = 2.5 × 180 =
2x + 10 = 450
2x = 440
x = 220
लम्बी ट्रेन की लम्बाई = x + 10 = 220 + 10 = 230 मीटर

Ans.49(B)

विचार	समझना	आवेदन	उचित गणना
कोण द्विभाजक के मामले में, ∠BOC = 90° + (∠A/2)	Given ∠BOC = 122°	122 = 90 + (A/2) A = 64°	(122 – 90) × 2 = 64°

Ans.50(B) 3, 5, 7 और 11 से विभाजित होने वाली सबसे छोटी संख्या = लघुत्तम समापवर्त्य (3, 5, 7, 11)
⇒ 3 × 5 × 7 × 11 = 1155
दूसरी सबसे छोटी संख्या = 2 × 1155 = 2310
2 शेष बचने के लिए, संख्या होनी चाहिए = 2310 + 2 = 2312