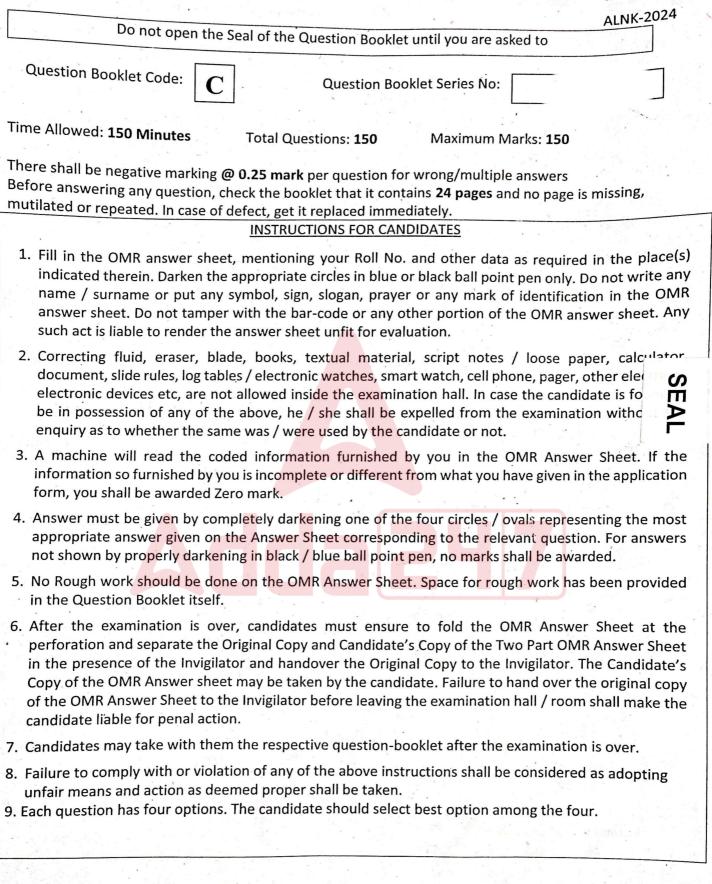




# **OSSC JE PRE 19 JANUARY 2025 PAPER**







#### LOGICAL REASONING

- 1. What is the next number in the series: 1, 1, 2, 3, 5,8, (2)?
  - a) 10 b) 11 c)≤12
  - d) 13
- 2. What are the missing numbers in this series: 15, 20, 24, 15, 28, 32, 15, ..., .4D.
  - a) 36, 40
  - b) 37, 41
  - c) 38, 42
  - d) 40, 44
  - 3. Find the missing letters in the series: CKDL, EKFL, GKHL, \_\_\_\_\_ KKLL.
    - a) IJKL
    - b) IKJL
  - c) MNOP
    - d) MNPQ
  - 4. If ACID is written as 1C3D, PAMPER is written as P1MP2R, then how will BOMBAY be written?
  - a) B4MB1Y
  - b) B3MB1Y
  - c) B5MB2Y
  - d) B4MB2Y

5. Find the correct option for the blank spaces.

		and the second se	
В	6	8	D
J	14	. 17	M
N	3 a 1		S
30 16	_ ,	í <u>-</u> í	

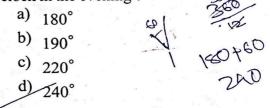
- a) 18, 23
- b) 14, 19
- c) 16, 21
- d) 15, 20
- 6. Consider the following words translated from an artificial language.
  - moolokarn means blue sky,
  - wilkospadi means bicycle race.
  - moolowilko means blue bicycle.

Which of the word in the options given below could mean "racecar" ?

- a) wilkozwet
- b) spadiwilko
- c) moolobreil
- d)\_spadivolo
- 7. A has two children B and C. B is married to D and they have a daughter E. If F is the brother of D, then how is F related to A ?
  - a) Son-in-law
  - b) Brother-in-law
  - c) Nephew
  - d) Cousin
- 8. If 'air' is called 'green', 'green' is called 'red', 'red' is called 'sea', 'sea' is called 'blue', 'blue' is called 'water' and 'water' is called 'pink', then what is the colour of grass ?
  - a) Green
  - b) Blue
  - c) ·Pink
  - d) Red
- 9. Arrange the following words in a meaningful sequence.
- 1. Selection 2. Probation 3. Appointment
- 4. Interview 5. Application 6. Advertisement

	a)	6, 5,	4, 1,	3,2	
/	b)	5, 2,	4, 3,	1,6	
			, 4, 1,		
	d)	<mark>6,</mark> 5,	, 4, 3,	1,2	

10. An accurate clock shows 10 o'clock in the morning. Through how many degrees will the hour hand rotate when the clock shows 6 o'clock in the evening?



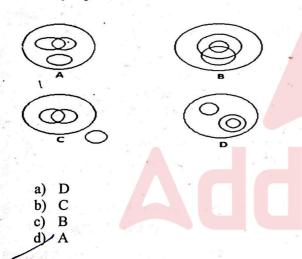
11. If every second Saturday and all Sundays are holidays in a 30 days month beginning Saturday, then how many working days are there in that month?

24

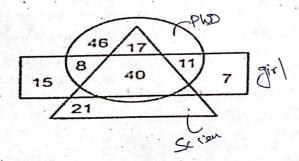




- c) 22d) 20
- 12. A sales executive went to meet his client A in another office 17 km away in the North-east direction of his own office. From there, he went to see client B in an office 15 km in the south of his client A's office. How far from the starting point and in what direction is he now?
  - a) 8 km, West
  - b) 7 km, South
  - c) 8 km, East
  - d) 7 km, North
- 13. In a party, both chicken and fish were served. Some ate only fish and some only chicken. Some people were vegetarians who did not eat either. The rest of the people ate both chickenand fish. Which of the following Venn-diagrams correctly represent this situation ?



14. In the given Venn diagram, the circle represents 'Ph.D. students', the triangle represents 'Science students' and the rectangle represents 'Girls'. The numbers given in the shapes represent the number of persons of that particular category. How many girls are Ph.D. students, but are NOT Science students?



	a)	11
	b)	19
/	c)	20
	d)	27

15. Consider the following assertion followed by a reason.

Assertion(A): Diamond is used for cutting glass.

**Reason(R)**: The refractive index of diamond is high. Pick out correct option.

- a) Both A and R are true and R is the correct explanation of A.
- b) Both A and R are true, but R is not the correct explanation of A.
- c) A is true, but R is false.
- d) A is false, but R is true.
- 16. Consider the question given below followed by two statements. Analyze the data of both thestatements and decide whether the statements are sufficient to answer the question.

Question: When is Deepak's birthday?

Statement: (I) Deepak's mother was born on 22 May, 1970.

Statement: (II) Deepak is 28 years younger than his father.

- a) Statement (I) alone is sufficient, but statement (II) alone is not sufficient.
- b) Statement (II) alone is sufficient, but statement (I) alone is not sufficient.
- c) Both the statements (I) and (II) are needed.
- d) Neither statement (I) nor statement (II) is sufficient.
- 17. Consider the following statement followed by two assumptions.

Statement: If it is easy to become a doctor, then I don't want to be a doctor.

### **Assumptions:**

(I) A candidate wants to be professional.

(II) One wants to achieve a thing which is hardearned.

In view of the above, which of the following assumptions is implicit?

- a) Only assumption (I)
- b) Only assumption (II)





- c) Both the assumptions (I) and (II)
- d) Neither assumption (I) nor assumption (II)
- 18. Consider the statement given below followed by two courses of action. You have to assume everything in the statement to be true and based on the information given in the statement, decide which of the suggested courses of action logically follow(s) for pursuing.

Statement: People residing in some rural areas do not get fair opportunities of education.

## Courses of action:

- (I) Government should open more schools in rural areas.
- (II) Awareness programme must be conducted in these areas.

Assuming the statement to be true and based on the information given in the statement, choose which of the suggested courses of action logically follow(s) for pursuing.

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

### 19. Consider the following passage.

"One of the important humanitarian by-products of technology is the greater dignity and value that it imparts to human labour. In a highly industrialized society, there is no essential difference between Brahmin and Dalit, Muslim and Hindu; they are equally useful and hence equally valuable for in the industrial society. Individual productivity fixes the size of the paycheque and this fixes social status."

The passage best supports the statement that:

- a) Technology decides individual's social status.
- b) Castes and religions are man-made.
- c) All individuals, irrespective of caste and creed, are born equal.
- d) Human labour has dignity and value.
- 20. Consider the following statement followed by two arguments.

Statement: Should India make efforts to harness solar energy to fulfil its energy requirements ?

## Arguments:

(I) Yes. Most of the energy sources used at present is exhaustible.

(II) No. Harnessing solar energy requires a lot

of capital, which India lacks in.

Select which of the arguments is a 'strong' argument and which is a 'weak' argument.

- a) Only argument (I) is strong.
- b) Only argument (II) is strong.
- c) Neither argument (I) nor argument (II) is strong.
- d) Both the arguments (I) and (II) are strong.
- 21. Consider the given statements followed by the conclusions.

Statement (A): Some lions are bats. Statement (B): Some bats are cat.

**Conclusion** (I): All lions are cat.  $\checkmark$ **Conclusion** (II): No cat are bats.  $\checkmark$ 

Choose the correct answer from the options given below.

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

22. Choose the correct option which logically follows from the following statement.

Statement: Many offices are located in buildings with multiple floors. If a building has more than three floors, it has a lift.

- a) All floors of buildings with multiple floors may be reached in lifts.
- b) Only floors above the third floor have lifts.
- c) Seventh floor does not have lifts.
- d) All buildings have lifts.

QIIIT

23. There are eight persons P, Q, R, S, T, U, V and W sitting in a row (not necessarily in the same order) and facing east. T is sitting fourth to the right of Q. V is sitting third from theright end of the row. Q is sitting between U and W who is sitting third to the left of T who is sitting at a corner. P is sitting immediate left of U. R is sitting at the left corner of the row. How many people are sitting to the right of W?

**Adda**247



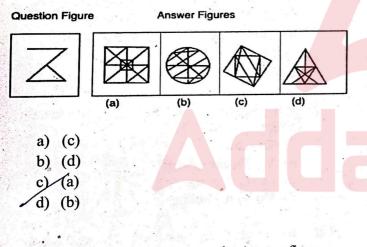


# 24. Consider the following information.

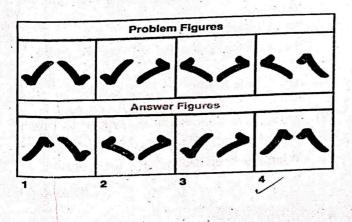
- 1. M \$ N means M is the mother of N.
- 2. M # N means M is the father of N.
- 3. M @ N means M is the husband of N.
- 4. M % N means M is the daughter of N.

Which of the following expressions indicate "R is the sister of H"2

- a) R%D@F\$H
- b) H\$D@F#R
- c) R \$ D @ F # H
- d) R \$ F # D % H
- 25. Choose the correct answer figure in which question figure is embedded.



26. Select a figure from amongst the Answer figures which will continue the same series as established by the problem figures.

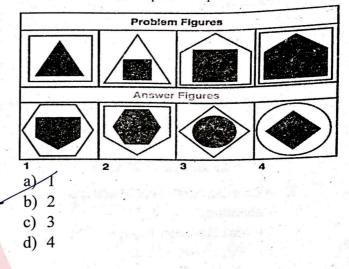


27. Find out the correct answer figure that should come next in the sequence of problem figures.

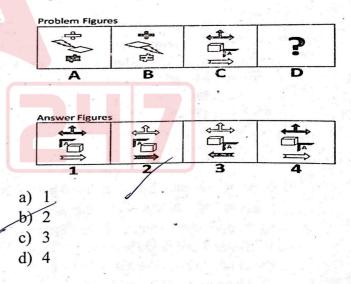
a) 1

b) 2c) 3

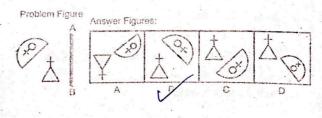
d)/4



28. Find out missing figure (?) in the problem figures from the given answer figures.



29. Choose the mirror image of the problem figure from the answer figures, if the mirror is placed to the right of the problem figure.





- a) D b) C
- c) A
- dy B
- 9. -

30. What is the horizontal mirror image of the word REST?

REST	REST	REST	REST
A	В	С	D

a) B b) C

c) D d) A

# **CURRENT AFFAIRS**

- 31. Who is the New Chief Minister of Maharashtra?
  - a) Shri Devendra Fadanvis
  - b) Shri Eknath Shinde
  - c) Shri Ajit Pawar
  - d) Shri Uddhav Thackeray
- 32. Chief Minister of Odisha presented supplementary budget for 2024-25 in OLA in November, 2024. How much was the amount involved?
  - a) Rs.12,156 crore
  - b) Rs.14,156 crore
  - c) Rs.6,156 crore
  - d) Rs.18,156 crore
- 33. Cyclone Fengal (hit November) primarily affected which States / Countries.
  - a) Puducherry, Tamilnadu and Srilanka
  - b) Gujarat and Maharashtra
  - c) Thailand and Malaysia
  - d) Vietnam and China
- 34. World Half Marathon record was broken recently at Valentia Half Marathon. Who is the new record holder ?
  - a) Daniel Mateiko
  - b) Isaia K Lasoi
  - c) Yomif Kejelcha
  - d) Jacob Kiplimo

- 35. Zimbabwe created new record for highest T20 total in October, 2024. What is the new record ?
  - a) 344 Runs
  - b) 314 Runs
  - c) 324 Runs
  - d) 354 Runs
- 36. Australian Government has banned social media access to children younger than?
  - a) 12 years of ageb) 14 years of age
  - c) 16 years of age
  - d) 18 years of age
- 37. When is Ayurveda Day celebrated?
  - a) October 29
  - b) October 19
  - c) October 9
  - d) October 24
- 38. Who has taken over as Chairman of National Commission for Women in October, 2024 ?
  - a) Ms Mamta Sharma
  - b) Shri Vijaya Kishore Rahatkar
  - c) Ms Rekha Sharma
  - d) Ms Lalitha Kumar Mangalam
- 39. Who was the elected President of Vietnam in October, 2024 ?
  - a) To Lam
  - b) Vo Thianh Xuan
  - c) Luong Cuong
  - d) Vo Van Thuong
- 40. Prime Minister launched "Shahid Madho Singh Haath Kharch Yogana " at Rourkela on November, 15. Who was Shahid Madho Singh ?

a) Binjhal Zamindar of Ghess locality of Bargarh

b) A freedom fighter

c) A close associate of Veer Surendra Sai

d) All the above

41. There have been major protests in Georgian capital Tbilisi in end November, 2024. What has been the reason for protests ?

Adda 24 7



- a) Accession to European Union
- b) Food inflation
- c) Election fraud
- d) Energy price rise
- 42. Bibek Debroy died recently. In which field did he distinguish himself?
  - a) Economics
  - b) Music
  - c) Sports
  - d) Theatre
- 43. What is Scrub Typhus?
  - a) A disease
  - b) A plant
  - c) A chemical
  - d) A medicine
- 44. Who is Vice President elect of USA?
  - a) J.D. Vance
  - b) Michael Pence
  - c) Niki Haley
  - d) Tim Walz
- 45. P.M. of Israel sacked the Defence Minister in November, 2024. Name the Defence Minister ?
  - a) Yoav Gallant
  - b) Israel Katz
  - c) Gideon Saar
  - d) Yair Lapid
- 46. Which Film received best film award for 2022 at Odisha State Film awards held in November, 2024?
  - a) Daman
  - b) Dalchini
    - c) Prativa
    - d) Shahid Raghu Sardar
- 47. Which country did Chief Minister of Odisha visit in November 2024 to attract foreign investment?
  - a) Indonesia
  - b) Singapore
  - c) UK
  - d) Malaysia
- 48. Shri Samir Dey died in November, 2024. He was a Minister in Odisha Government during 2000 – 2004 and 2004 – 2009. Which portfolio did he hold during 2000-2004?

- a) Food & Civil Supplies
- b) Urban Development
- c) Higher Education
- d) Works
- 49. In which city did G20 Summit took place in November, 2024?
  - a) Rome
  - b) Rio De Janeiro
  - c) Osaka
    - d) Bali
- 50. Spanish Prime Minister along with Indian Prime Minister launched C- 295 Aircraft facility in India recently. Name the Spanish Prime Minister ?
  - a) Mariano Rajoy
  - b) Pedro Sanchez
  - c) Jose Maria Aznar
    - d) Felipe Gonzalez
- 51. Donald Trump defeated Kamala Harris in November, 2024 Elections for US President. How many Electoral College votes did he get?
  - a) 226
  - b) 312
  - c) 274
  - d) 294

52. Who was sworn in as CM of Jammu &

- Kashmir in October, 2024?
  - a) Mehbooba Mufti
  - b) Farooq Abdullah
  - c) Omar Abdullah
  - d) Gulam Nabi Azad
- 53. Who is Bina Muduli?
  - a) First Bonda woman to get a Ph.D.
  - b) First Bonda woman to qualify in Odisha Civil Service.
  - c) First Bonda woman to qualify NEET.
  - d) A Bonda writer.
- 54. A number of sports events have been dropped out of 2026 Common Wealth Games. What is the correct information out of the following about the sports



events dropped out of 2026 Common Wealth Games ?

a) Cycling, Netball & Cricket

Adda 247

- b) Swimming, Boxing & Cricket
- c) Badminton, Cricket, Hockey, Squash, Table Tennis & Wrestling
- d) Weight Lifting, Basket Ball & Cricket
- 55. Elon Musk in October, 2024 promised to pay to randomly selected person(s) who signs his online petition pledging to support the first & second amendment of US Constitution (free speech and gun ownership). How much money was promised ?
  - a) 1,000 US dollars
  - b) 10,000 US dollars
  - c) 100,000 US dollars
  - d) 1,000,000 US dollars
- 56. Which Odisha Leader's 125<sup>th</sup> birth anniversary is being celebrated this year from 21st November, 2024 ?
  - a) Shri Biswanath Das
  - b) Shri Nabakrushna Chaudhury
  - c) Shri Harekrushna Mahatab
  - d) Shri Rajendra Narayan Singhdeo
- 57. Shyam Benegal died in December, 2024. In which field did he distinguish himself?
  - a) Literature
  - b) Dance
  - c) Film Making
  - d) Music

58. Who is the cabinet minister in Union Govt. in charge of Ministry of Electronics and Information Technology?

- a) Shri Hardeep Singh Puri
- b) Shri Kiren Rijiju
- c) Shri Jyotiraditya M. Scindia
- d) Shri Ashwini Vaishnaw

59. Who is the cabinet minister in Union Govt. in charge of Ministry of Environment, Forest and Climate change?

- a) Shri Bhupender Yadav
- b) Shri Gajendra Singh Shekhawat

- c) Shri Kiren Rijiju
- d) Smt. Annpurna Devi

60. Who has been appointed as the Governor of Assam in July 2024?

- a) Shri Lakshman Prasad Acharya
- b) Shri K. Kailashnathan
  - c) Ms Anusuiya Uikey
  - d) Shri Gulab Chand Kataria

#### **COMPUTER & INTERNET AWARENESS**

- 61. Which of the following chart types is best suited for showing the percentage of different parts of a whole chart in MS Excel?
  - a) Line Chart
  - b) Bar Chart
  - c) Pie Chart
  - d) Scatter Plot
- 62. Which of the following options in Windows 10 allows you to uninstall or change installed software applications?
  - a) Control Panel
  - b) Task Manager
  - c) Windows Installer
  - d) Windows Update
- 63. What are the correct steps to open the mouse settings directly in the Windows operating system?
  - i. Press Win + I to open the Settings app directly.
  - ii. Navigate to Devices from the menu.
  - iii. Select Mouse from the given options.
    - a) i, ii, iii
    - b) i, iii, ii
    - c) ii, i, iii
    - d) iii, ii, i
- 64. You want to create a slide that compares computers to human beings. Which of the following layouts is NOT suitable to accomplish this task?
  - a) Title and 2-column Text Layout
  - b) Blank layout
  - c) Title and text layout



# d) Comparison

Adda 247

- 65. A computer system's performance is slowing down due to excessive use of system resources. Which of the following system software tools would be the most effective in identifying and resolving the issue?
  - a) A work processor to document the performance metrics and report findings.
  - b) A disk defragmenter to organise fragmented files on the hard drive.
  - c) A task manager or system monitor to analyse running processes and terminate those consuming excessive resources.
  - d) An antivirus program to scan for remove potential malware affecting system performance.
  - 66. In a Windows OS, which of the following best describes the function of 'pinned' taskbar icons, particularly in relation to the Start Menu?
    - a) Pinned icons allow programs to launch automatically when the system starts.
    - b) Pinned icons represent minimised programs that are currently running.
    - c) Pinned icons provide quick access to frequently used applications directly from the taskbar.
    - d) Pinned icons are shortcuts to
      - applications that can only be accessed from the Start Menu.
- 67. Which of the following generation of computers is characterised by the introduction of integrated circuits (ICs) and witnessed the transition from transistors to more compact and reliable components?
  - a) First Generation
  - b) Second Generation
  - c) Third Generation
  - d) Fourth Generation
- 68. Which of the following steps is the correct way to insert a Clip Art picture into a PowerPoint slide in MS Office PowerPoint 2007?
  - a) Go to the 'File' tab -> Select 'Open' -> Choose 'Clip Art'

- b) Go to the 'Insert' tab -> Click on 'Clip Art' -> Search for the desired image -> Click 'Insert'
- c) Right-click on the slide -> Select 'Insert Clip Art' from the context menu
- d) Go the 'Design' tab -> Select 'Clip Art' -> Choose the image to insert
- 69. In Microsoft Word, \_\_\_\_\_ displays the document as it will appear on the printed page, including headers, footers, and margins.
  - a) Draft view

.

- b) Web browser view
- c) Print layout view
- d) Outlet view
- 70. Which of the following early computing machines is most directly associated with the concept of stored programs, allowing instructions to be stored in the machine's memory rather than hardwired into its circuitry?
  - a) ENIAC
  - b) UNIVAC I
  - c) IBM 701
  - d) EDVAC
- 71. In Windows 10, how can a user customise the icons that appear in the System Tray?
  - a) Go to Control Panel > Appearance and Personalization > Taskbar
  - b) Go to Settings > Devices > System Tray
  - c) Right-click and select 'icons'
    - d) Go to Settings > System >
    - Notifications & actions
- 72. Which statement is True or False when running an application on a Windows computer?
  - i. A registered user account is required to run an application on a Windows computer.
  - Hypervisor allows multiple virtual machines to run on a single physical machine, each with its operating system and applications.
    - a) (i) True, (ii) True
    - b) (i) True, (ii) False





- c) (i)False, (ii) True
- d) (i) False, (ii) False
- 73. In a Windows OS, which of the following features allows users to locate files and folders across the system using natural language queries and filters such as date modified, file type and size?
  - a) Cortana
  - b) Search Box in File Explorer
  - c) Indexing Options
  - d) Command Prompt
- 74. Which of the following devices serves both as an input and an output device?
  - a) Keyboard
  - b) Monitor
  - c) Touchscreen
    - d) Printer
- 75. Which of the following technologies is commonly used in high-end monitors to provide better colour accuracy and viewing angles?
  - a) Twisted Nematic (TN) Panels
  - b) In-Plane Switching (IPS) Panels
  - c) Cathode Ray Tube (CRT) Displays
  - d) Digital Light Processing (DLP) Technology
- 76. Which of the following steps would you take to print an MS Excel spreadsheet?
  - a) Click on 'File' > 'Open'
  - b) Click on 'File' > 'Print' > Select
  - Printer > Click on 'Print'
  - c) Press 'Ctrl + S'
  - d) Click on 'File' > 'Save As'
- 77. Which of the following options allows you to customise the handouts by adding headers, footers and page numbers before printing them in MS PowerPoint?
  - a) Go to the 'Insert' tab-> Select 'Header & Footer' -> Choose 'Handout' to customize the options.
  - b) Go to the 'File' tab -> Select 'Print' -> Click on 'Handout Master' to customize the handouts

- c) Go to the 'View' tab -> Select 'Handout Master' -> Customize the layout -> Print
- d) Go the 'Design' tab -> Select 'Print Setup' -> Customize the handouts
- 78. In modern CUPs, which of the following techniques is primarily used to increase instruction-level parallelism and improve processing efficiency?
  - a) Pipelining
  - b) Caching
  - c) Virtualisation
  - d) Hyperthreading
- 79. Modern mobile phones and tablets utilise specialised operating systems optimised for touchscreen interfaces and resource constraints. Which of the following statements correctly describes a key distinction between Android and iOS operating systems in terms of software distribution and system architecture?
  - a) Android supports third-party app stores and is based on the open-source Linux Kernel, while iOS restricts app distribution to the Apple App store and is built on a closed-source UNIX architecture.
  - b) Both Android and iOS are open-source operating systems that allow installation of apps from multiple sources.
  - c) iOS provides full customisation of the system interface, while Android is restricted to manufacturer-defined interfaces.
  - d) Android devices exclusively use ARM architecture processors, while iOS devices are capable of using both ARM and x86 architecture processors.
  - 80. Which function in MS Excel checks for a condition and counts the number of values that satisfy the given condition?
    - a) COUNT
    - b) COUNTIF
    - c) IF
    - d) MAP
  - 81. Which of the following characteristics of a computer system is most crucial in enabling parallel processing, allowing the computer ALNK-ENG-C-10





to execute multiple instructions simultaneously?

- a) Scalability
- b) Speed
- c) Reliability
- d) Concurrency
- 82. Which of the following is an example of an absolute cell reference in MS-Excel?
  - . a) A1
  - b) \$A\$1
  - c) A\$1
    - d) \$A1
- 83. Which of the following accurately describes the main contribution of Ada Lovelace to the field of computing?
  - a) Inventing the first mechanical computer
  - b) Writing the first algorithm intended for implementation on a machine
  - c) Developing the first commercial computer
  - d) Creating the first programming language
- 84. In a Windows OS, which setting allows a user to swap the functions of the left and right mouse buttons, making the right button the primary button for selecting and clicking?
  - a) Pointer Options
  - b) Button Configuration
  - c) ClickLock
    - d) Double-Click Speed
- 85. You are working on a document in MS-Word and want to quickly change the alignment of a paragraph to be centeraligned using the icons below the menu bar. Which of the following icons should you click to achieve this?
  - a) The icon with horizontal lines aligned to the left
  - b) The icon with horizontal lines aligned
  - / to the center
  - c) The iccn with horizontal lines aligned to the right
  - d) The icon with horizontal lines justified

- 86. In the field of cryptography, which of the following applications of computers is essential for ensuring the secure transmission of data over a network, particularly in the context of quantum computing?
  - a) Symmetric Key Encryption using Classical Algorithms
  - b) Asymmetric Key Encryption based on RSA Algorithm
  - c) Quantum Key Distribution (QKD) for Secure Communication
  - d) Hash Functions for Data Integrity Verification
- 87. Which of the following power-saving modes in a Windows OS saves the state of open documents and applications to the hard disk and then completely powers off the computer, allowing for zero power consumption until the system is turned back on?
  - a) Sleep
  - b) Hibernate
  - c) Hybrid Sleep
    - d) Fast Startup
- 88. The contents of the active cell are displayed in:
  - a) Cell Range
  - b) Formula Bar
  - c) Title Bar
  - . d) Name Box
- 89. What does 'Gutter' refer to in the Page Setup settings of the Microsoft Work Processor?
  - a) Page orientation
  - b) Page type
  - c) Page margin
  - d) Page preview
- 90. What does the Performance tab in the Windows Task Manager do?
  - a) Gives details about currently running applications and processes
  - b) Gives real-time data on the usage of system resources
  - c) Gives the history of application usage and resource graph



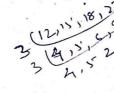
25 12:6

d) Gives details about startup programs and their impact on system boot time

### ARITHMETIC

- 91. The largest four digit number exactly divisible by each of 12, 15, 18 and 27 is:
  - a) 9930 b) 9690 c) 9720 d) 9960

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92. The traffic lights at three different road crossings change after every 48 seconds, 72 seconds and 108 seconds respectively. If they all change simultaneously at 8:20 hours, then at what time will they again change simultaneously?

a) 8:27:12 hrs b) 8:27:48 hrs c) 8:27:24 hrs d) 8:27:36 hrs

- 93. The number whose square is equal to the difference of the squares of 75.15 and 60.12 is:
  - a) 45.09
  - b) 46.09
  - c) 47.09
  - d) 48.09
- 94. People in a rally are made to stand in rows. If 4 persons are extra in each row, there would be 2 rows less. If 4 persons are less in each row, there would be 4 more rows. The number of persons in the rally are:

(1+2) - 2, (2-4) + 4

15×2×150 (7×2+1) 15×2×150 (7×2+1) 50 1.5

- a) 90
- b) 92
- c) .94
- d) 96
- 95. In a class with certain number of students, if one student weighing 50 kg is added then average weight of the class increases by 1 kg. If one more student weighing 50 kg is added, then the average weight of the class increases by 1.5 over the original average. What is the original average weight of the class? 50

a) 2 kg

b) 15 kg

c) 47 kg

d) 55 kg

96. In a two digit positive number, the unit digit is equal to the square of tens digit. The difference between the original number and the number formed by interchanging the digits is 54. What is 40% of the original number? 2 4 39 4

a) 15.6 b) 37.2 c) 24

d) None of these

97. Six years ago, the respective ratio between the ages of Riddhi and her father at that time was 1 : 7. The difference between the age of Riddhi's father and Riddhi is 36 years. What will be Riddhi's age 5 year from now? 61:742 61:742

12

5

\$0 i

- a) 13 years b) 17 years c) 19 years d) 21 years
- 98. A man had a certain amount of money with him. He spent 20% of that to buy grocery and 5% of the remaining on transport, and gifted away ₹ 120. If he is left with ₹1,400, then the amount he spent on transport is: 8.0 x 4 =
  - a) ₹76
  - b) ₹61
  - c) ₹95
  - d) ₹80

210 99. The seven digit number 876p37q is divisible by 225. The values of p and q can be respectively:

15×15

3x5 3x5'

a) 9,0 b) 0,5 c) 0,0 d) 9.5

100. A business man gives 4% discount on the marked price and gives 1 article free for buying every 15 articles and thus





gains 35%. The marked price is increased above the cost price by:

- a) 20%
- b) 39%
- c) 50%
- d) 55%
- 101. A pond was dug by four men: Nishant, Priyanam, Aniruddha and Rahim. They were paid a total of ₹1500 and the money is to be shared in the ratio of 1:2:2:1 respectively. What is the share of Nishant and Rahim together?
  - a) <sup>•</sup>₹ 1500
  - b) ₹1000
  - c) ₹500
  - d) None of these
- 102.11 friends went to a restaurant and decided to pay the bill amount equally but 10 of them could pay  $\gtrless$  60 each, as a result 11th friend has to pay ₹ 50 extra than his share. Find the amount paid by him(11th friend): \*
  - a) ₹105
  - b) ₹110
  - \$ ₹ 115
  - d) ₹120
- 103. Running at the same constant rate, 6 identical machines can produce 2700 files per minute. At this rate, how many files could 10 such machines produce in 4,50×10×4

12000

- 4 minutes?
- a) 648 b) 1800
- c) 2700
- d) 10800

104. E, F and G can do a piece of work in 20 days, 30 days and 60 days respectively. In how many days can E do work, if he is assisted by F and G3 E 30 be 1 67 12 12 G 60 313 16 × 3×3×6 × 12 12 3×3 16 × 3×3×6 × 12 12

- on every third day?
- a) 12
- b) 13 c) 15
- d) 18

- 105. Nine taps of same capacity can fill a water tank completely in 20 minutes. How many taps of the same capacity are required to fill up the same water tank in 15 minutes? 9 × 20 = 180 15 12×15 3 1 × 2 × 10 2 × × 2×15
- a) 10 b) 11 c) 14 d) 15
- 106. It takes eight hours for a 600 km journey, if 120 km of it is done by train and the rest is done by car. It takes 20 minutes more, if 200 km is done by train and the rest by car. The ratio of the speed of the train to that of the car is :
  - a) 3:5 9614 b) 3:4 c) 4:3 d) 4:5

27

1.5

8

- 107. Two trains running in opposite directions cross a man standing on the platform in 27 seconds and 17 seconds respectively and they cross each other in 23 seconds. What is the ratio of their speeds?
  - a) 3:2 b) 2:1 c) 4:3 d) 1:2

108. A man can row  $7\frac{1}{2}$  kms an hour in still

water and he finds that it takes him twice as long to row down the river. The rate of the stream is:

- a) 2.4 km/hr
- b) 3.4 km/hr
- c) 2.5 km/hr
- d) 3.5 km/hr

109. How many kgs of Bajra costing ₹8 per kg must be mixed with 36 kg of wheat costing ₹ 5.40 per kg, so that 20% gain many be obtained by selling the mixture at ₹ 7.2 kg? 36 × 5:40

- a) 10.8 kg
- b) 10.6 kg
- c) 10.4 kg
- d) 9.8 kg

ALNK-ENG-C-13

7.2



600×8500 = 48 64 2400×14 = 54 2400×14 = 54

23 7 3/400

- 110. If the annual rate of simple interest increases from 10% to 12  $\frac{1}{2}$  %, a man's annual income increased by ₹ 1250. The principal is: 2.55 = 12.50 ×100 ×10
  - a) ₹45000 b) ₹50000
  - c) ₹60000
  - d) ₹65000

111. At what rate of interest will ₹ 20000 become ₹ 24200 after 2 years when interest is compounded annually? 1210

20000 1

- a) 5 % b) 6%
- c) 10%
- d) 15%
- 112. The sum of all possible 3 digit numbers formed by digits 3, 0 and 7, using each digit only once is: 307
  - a) 2010
  - b) 2220
  - c) 1990
  - d) 2110

113. A carpet of 90 cm wide is to be laid at ₹ 4.80/m in a room, which is 10m long. The total cost of carpeting is ₹ 960. What is the breadth of the room?

2000 ×900

650 ×

- a) 17 m
- b) 17.5 m
- c) 18 m
- d) 18.5 m

114. Three pipes D, E, F can fill a tank in 6 hours. After working at it together for 2 hours, F is closed and D & E can fill the remaining part in 7 hours. The number of hours taken by F alone to fill the tank is:

- Dtetf = 6 Btetf 2 2 wour 1/13 DtE= Hour 2/3 2.5000 a) 10 b) 12 c) 14 d) 16
- 115. In an alloy, the ratio of Aluminium and Copper is 5: 2. If 1.250 kg of Copper is mixed in 17 kg 500 g of alloy, then the

5.7 50,00

ratio of Aluminium and Copper in the alloy will be:

- a) 1:2
- b) 2:1
- c) 2:3 d) 3:2
- 116. A merchant has 1000 kg of brinjals, part of which he sells at 8 % profit and the rest at 18% profit. He gains 14% on the whole. The quantity sold at 18% profit
  - is:
    - a) 560 kg
    - b) 600 kg
    - c) 400 kg
    - d) 640 kg

# 117.150% of 15 + 75% of 75 = ?

- a) 75.75
- b) 281.25
- c) 135
- d) None of these

118. A class starts at 10 a.m and lasts till 1.27 pm. Four periods are held during this interval. After every period, 5 minutes are given free to the students. The exact duration of each period is:

- a) 42 min
- b)  $48 \min$
- c) 51 min
- d) 53 min
- 119. Alankar goes 4 km against the current of a stream in 1 hour and 2 km along the current in 15 min. How long will it take him to go 7 km in stationary water?
  - a) 1 h 15 min
  - b) 1 h 20 min
  - c) 1 h 10 min

d) 1h5min

wig applied with with & with 2. Some

120. The sum of squares of the first ten natural (1, 4, 1/ 1, 1, 2) (1, 4, 1/ 1, 1, 2) 20, 1/ 1, 5, 1 numbers is:

- a) 300
- b) 55

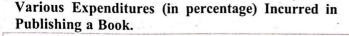


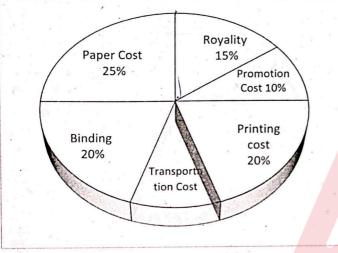


c) 385 d) 380

### **DATA INTERPRETATION**

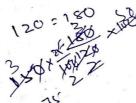
**Direction (Ques. Nos 121-124)** The following pie-chart shows the percentage distribution of the expenditure incurred in publishing a book. Study the pie-chart and answer the questions based on it.





121. What is the central angle of the sector corresponding to the expenditure incurred on Royalty?

- a) 15°
- b) 24°
- c) 48°
- d) 54°
- 122. The price of a book is marked 20% above the cost price. If the marked price of the book is Rs.180, then what is the cost of the paper used in a single copy of the book?
  - a) Rs.36
    b) Rs.37.50
    c) Rs.42
    d) Rs.44.25

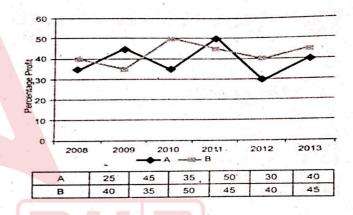


123. If 5, 500 copies of the book are published and the transportation cost on them amounts to Rs.82, 500, then what should be the selling price of the book so that the publisher can earn a profit of 25%?

- a) Rs.175
  b) Rs.180
  c) Rs.187.50
  d) Rs.191.50
- 124. Royalty on the book is less than the printing cost by:

	-	
	a)	33.33%
	b)	25%
1	c)	20%
	d)	5%

**Direction (Ques.Nos. 125-129)** Refer to the graph and answer the given questions. Percentage profit earned by two companies A and B over the six years.



125. If the income of company B in 2010 and 2011 were in the ratio of 2 : 3, respectively, then what was the respective ratio of expenditures of that company in these two years ?

- a) 9:10
- b) 10:29
- c) 20:29
- d) 29:45
- 126. If the expenditure of companies A and B in 2013 were equal and the total incomes of the two companies was 5.7 lakhs. Then what was the total expenditure of the two companies in 2013?
  - a) 2 lakhs
  - b) 4 lakhs
  - c) 4.2 lakhs
  - d) Cannot be determined

127. Total expenditure of company A in all the years

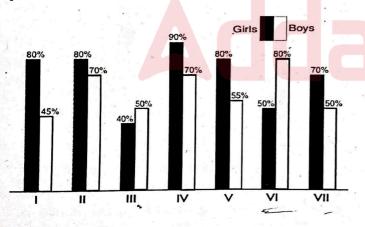




together was 82.5 lakhs. What was the total income of company A in all the years together?

- a) Insufficient data
- b) 1.23 crores
- c) 98.75 crores
- d) 99.85 crores
- 128. The ratio of expenditures of companies A and B in 2012 was 3 : 4, respectively. What was the respective ratio of their incomes in 2012?
  - a) 13:14
  - b) 14:13
  - c) 21:26
  - d) 39:56
- 129. Expenditure of company B in 2009 and 2010 are 12 lakhs and 14.5 lakhs, respectively. What was the total income of company B in 2009 and 2010 together?
  - a) 39.75 lakhs b) 37.95 lakhs
  - c) 38.75 lakhs
  - d) 38.55 lakhs

Direction (Ques. Nos. 130-132) The bar graph given below shows the annual result of different classes of a school. Study the graph carefully and attempt the question that follow.



130. In which of the following classes pass percentage of girls is less than the average pass percentage of the school?



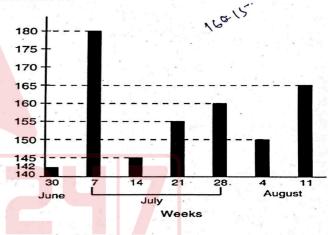
131. Average pass percentage of the boys in classes

II and III is equal to average pass percentage of the girls in which of the following classes?

- a) II-VI b) I-V c) VI-VII d) V-VI
- 132. Result of which class shows maximum difference between pass percentage of the girls and theboys?

ia inc		5:
	a)	1
/	b)	III
	c)	IV
	d)	VI

Direction (Ques. Nos. 133-136) The bar graph given here represents the number of persons killed in road accidents during rainy season in the year 2009. Study the graph carefully and answer the questions that follow:



- 133. During which of the following successive weeks the number of persons killed was the highest?
  - a)  $4^{th}$  August  $11^{th}$  August 165 + 150b)  $14^{th}$  July- $21^{st}$  July  $\times 145 + 1557$ c)  $30^{th}$  June  $7^{th}$  July 180 + 142d)  $21^{st}$  July  $28^{th}$  July 1607 + 1557
- 134. During which of the following successive weeks the number of persons killed came down to a minimum level?
  - a) 28<sup>th</sup> July 4<sup>th</sup> August
  - b) 7th July 14th July
  - c)  $30^{\text{th}}$  June  $7^{\text{th}}$  July
    - d) 21<sup>st</sup> July 28<sup>th</sup> July



- 135. In how many weeks the number of persons killed was less than 150 ?
  - a) 1 b) 2 c) 3 d) 4
- 136. In how many weeks the number of persons killed was more than 150 ?
  - a) 1
    b) 2
    c) 3
  - d)/4

**Direction (Ques. Nos. 137-140)** The table shows the exports of biscuit from a country during various years as given in the following table. Study the table carefully and answer the questions that follows:

Volume of Exports of Biscuits from a Country

Year	Quantity (in lakh tins)	Price (in Crores Rs.)
2004	100	150
2005	.75	150
2006	150 ·	330
2007	160 ·	400
2008	200	500

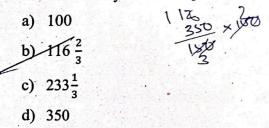
137. During which years the price per tin remained

at the same level ? a) 2004 and 2006 b) 2006 and 2008 c) 2006 and 2007 d) 2007 and 2008

is:

330 150

138. The export price of the biscuits increased from 2004 to 2008 by how much percent ?



139. The difference between the number of biscuits tins exported in 2008 and that in 2007

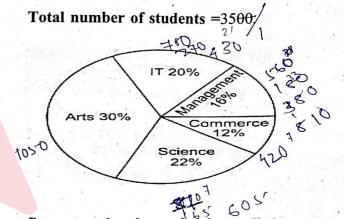
a) 40
b) 40,000
c) 4,00,000
d) 40,00,000

140. During which year per tin export price remained at highest level ?

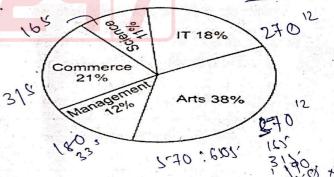
- a) 2007
- b) 2006
- c) 2005
- d) 2004

**Direction (Ques. Nos. 141 - 145)** Study the following pie-charts carefully and answer the questions given below:

Percentage of students enrolled in different streams in a college.



Percentage break-up of girls enrolled in these streams. Out of the total students, total number of girls =1500.



141. The number of girls enrolled in Arts, Science, and Commerce form what percent of the total number of students in the college ?

	a)	30%
1	b)	47%
	c)	60%
	d)	75%



- 142. If 20% of the girls enrolled in Science change their stream to Management, then what will be the new number of Management students altogether?
  - a) 453
  - b) 593
  - c) 733
  - d) 1003
  - 143. What is the total number of girls enrolled in Science and Commerce together?
    - a) 345
    - b) 450
    - 480 c)
    - d) 495
- 144. What is the ratio of the number of girls enrolled in Arts to the number of boys enrolled in Science?
  - a) 2:3
  - b) 14:23
  - c) 53:65
  - d) 114:121 ×5 1
- EUS 145. What is the total number of boys enrolled in Management and IT together?
  - a) 810
  - b) 980
  - c) 1050
  - d) 1120

Direction (Ques. Nos. 146-150) Study the table carefully and answer the given questions.

Total exports of six countries over five years (in crore) Profit = Exports - Imports

Years ->	1998	1999	2000	2001	2002
Country ↓	1790	1 .	2000		
P.	20	40	60	45	90
Q	30	25	15	50	100
R	50	55	70	90	65
S	45	60	20	15	25
T	60	50	55	100	110
U	24	40	60	.75	. 120

146. What is the percentage increase in the export 210 x100 of all the countries together during the year 1999 to 2001 ? (rounded off to two digits after decimal).

- a) 88.99%
- b) 72.39%

- c) 38.89% d) 62.89%
- 147.By what percent is the average export of country T over all the given years more than the average export of country R over all the given years?
  - a)  $13\frac{7}{11}$ % b)  $9\frac{1}{11}$ % c)  $13\frac{5}{7}$  % d)  $4\frac{7}{11}$  %
- 148. If the export of country P in the year 2003 is 20% more than the total export of country Q in 2001 and the export of country T in 2000 together, then what was the profit of P in the year 2003, if its import was 92 crore for that year ?
  - a) 10 crores.
  - b) 22 crores.
  - c) 34 crores.
  - d) 46 crores.
- 149. If the ratio of export to import in country S and country U is 1: 2 and 4: 1 in the year 1998, then what is the total import of country U and S together in that particular years?
  - a) 44 crores.
  - b) 52 crores.
  - c) 92 crores.
  - d) 96 crores.
- 150. What was the profit of all the countries together in the year 2002, if the total imports of allthe countries together was 385 crores?
  - a) 125 crores
  - b) 160 crores.
  - c) 200 crores.
  - d) 240 crores.

270