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OSSC SA

Previous Year Paper

06 Oct, 2024



Do not open the Seal of the Question Booklet until you are asked to

ASAT-2023

Question Booklet Code:

B

Question Booklet Series No:

112406

Time Allowed: **90 Minutes**

Total Questions: **100**

Maximum Marks: **100**

There shall be negative marking @ 0.25 mark per question for wrong/multiple answers

Before answering any question, check the booklet that it contains **16 pages** and no page is missing, mutilated or repeated. In case of defect, get it replaced immediately.

INSTRUCTIONS FOR CANDIDATES

1. Fill in the OMR answer sheet, mentioning the Roll No. and other data as required in the place(s) indicated therein. Darken the appropriate circles in blue or black ball point pen only. Do not write any name / surname or put any symbol, sign, slogan, prayer or any mark of identification in the OMR answer sheet. Do not tamper with the bar-code or any other portion of the OMR answer sheet. Any such act is liable to render the answer sheet unfit for evaluation.
2. Correcting fluid, eraser, blade, books, textual material, script notes / loose paper, calculator, document, slide rules, log tables / electronic watches, smart watch, cell phone, pager, other electrical electronic devices etc, are not allowed inside the examination hall. In case the candidate is found to be in possession of any of the above, he / she shall be expelled from the examination without any enquiry as to whether the same was / were used by the candidate or not.
3. A machine will read the coded information furnished by you in the OMR Answer Sheet. If the information so furnished by you is incomplete or different from what you have given in the application form, you shall be awarded Zero mark.
4. Answer must be given by completely darkening one of the four circles / ovals representing the most appropriate answer given on the Answer Sheet corresponding to the relevant question. For answers not shown by properly darkening in black / blue ball point pen, no marks shall be awarded.
5. No Rough work should be done on the OMR Answer Sheet, Space for rough work has been provided in the Question Booklet itself.
6. After the examination is over, candidates must ensure to fold the OMR Answer Sheet at the perforation and separate the Original Copy and Candidate's Copy of the Two Part OMR Answer Sheet in the presence of the Invigilator and handover the Original Copy to the Invigilator. The Candidate's Copy of the OMR Answer sheet may be taken by the candidate. Failure to hand over the original copy of the OMR Answer Sheet to the Invigilator before leaving the examination hall / room shall make the candidate liable for penal action.
7. Candidates may take with them the respective question-booklet after the examination is over.
8. Failure to comply with or violation of any of the above instructions shall be considered as adopting unfair means and action as deemed proper shall be taken.

SEAL

ASAT-ENG-B-1

CURRENT EVENTS

1. India won bronze medal in Men's Field Hockey in Paris Olympics, 2024. Who was the player from Odisha in this team ?

- a) Amit Rohidas
- b) Birendra Lakra
- c) Deep Grace Ekka
- d) Lazarus Barla

2. Prime Minister Narendra Modi recently visited Singapore on an official visit. What is the name of the Prime Minister of Singapore with whom Prime Minister Modi had summit level meeting?

- a) Lee Kuan Yew
- b) Goh Chok Tong
- c) Lawrence Wong
- d) Lee Hsien Loong

3. How many Assembly Constituencies are there in Haryana ?

- a) 147
- b) 100
- c) 90
- d) 75

4. By how much weight was Vinesh Phogat found over weight in the morning of 7th August 2024, which led to her disqualification from 50 Kg weight category?

- a) 1 Kg
- b) 2 Kg
- c) 100 gm
- d) 500 gm

5. The 70th National Film Awards were announced in August, 2024. Who won award for the Best Feature Film?

- a) Rocketry
- b) Aattam
- c) Brahmastra
- d) KGF Chapter 2

6. Which country achieved the top rank in medal tally of Paris Paralympic games, 2024?

- a) China
- b) USA
- c) Great Britain
- d) Netherlands

7. Who has been appointed as the Cabinet Secretary of India recently?

- a) T.V. Somanathan

- b) Rajiv Gauba
- c) Govind Mohan
- d) Manoj Ahuja

8. Who won the Tennis Men's Singles Gold Medal at Paris Olympics 2024?

- a) Novak Djokovic
- b) Carlos Alcaraz
- c) Roger Federer
- d) Alexander Zverev

9. Which country won the top rank position in Paris Olympics 2024 Medal tally ?

- a) U.S.A.
- b) China
- c) France
- d) Japan

10. What was India's rank / position at Paris Olympics 2024 Medal tally?

- a) 41
- b) 51
- c) 61
- d) 71

11. Odisha girl Tanvi Patri was in news recently for winning:

- a) Gold medal in under 15 World Junior Badminton Championship
- b) Gold medal in under 15 Asia Junior Badminton Championship
- c) Gold medal in Asia Under 17 Table Tennis Championship
- d) Gold medal in Asia Under 19 Table Tennis Championship

12. World Development Report 2024 was released recently by which organization?

- a) IMF
- b) SAARC
- c) World Bank
- d) UNDP

13. Who has been appointed as the Governor of Rajasthan, in July 2024?

- a) Shri C.H. Vijayshankar
- b) Shri Santosh Kumar Gangwar
- c) Shri Haribhau Kisanrao Bagde
- d) Shri Jishnu Dev Varma

14. Who is the Minister of State (Independent Charge) of Department of Labour & Employees State Insurance of Odisha Government ?

- a) Shri Suryabansi Suraj
- b) Shri Ganesh Ram Singkhuntia
- c) Shri Pradeep Bal Samanta
- d) Shri Gokulananda Mallick

15. Who is the Cabinet Minister in Union Government. in charge of Ministry of Jal Shakti ?

- a) Shri Gajendra Singh Shekhawat
- b) Shri C R Patil
- c) Shri Hardeep Singh Puri
- d) Dr. Mansukh Mandaviya

DATA INTERPRETATION

Direction (Question Nos. 16 - 20): The given table shows the number of three different color balls in four different boxes.

Boxes	Number of balls		
	Red	Yellow	Blue
A	15	?	10
B	?	20	?
C	30	?	15
D	?	10	20

Study the given information carefully and answer the following questions.

16. The average number of blue balls in all the boxes together is 15 and the number of blue balls in the box B is equal to the number of red balls in the box D. What is the average number of balls in the box D?

- a) 20
- b) 15
- c) 12
- d) 10

17. Ratio of the number of red balls in the boxes B and D is 2 : 1 and the average number of balls in the box B is 25. If the total number of red balls in all the boxes together is 75, then what is the number of blue balls in the box B ?

- a) 20
- b) 25
- c) 30
- d) 35

18. Total number of balls in the box D is 45 and the ratio of the number of red balls in the box D to the number of yellow balls in the box A is 3 : 4. What is the total number of balls in the box A ?

- a) 45
- b) 40
- c) 35
- d) 30

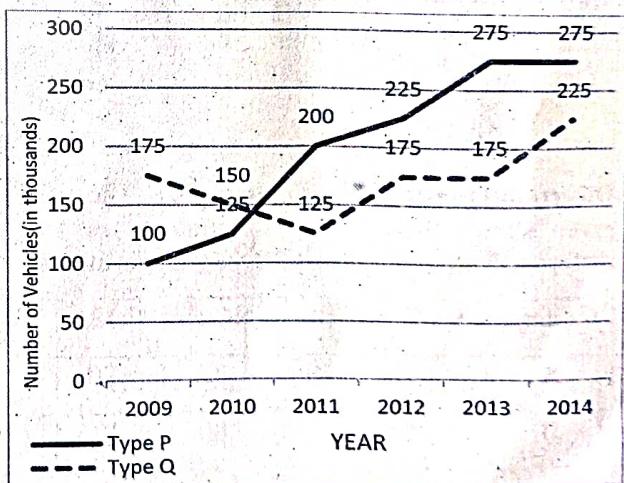
19. Average number of balls in the box C is 21 and the average number of yellow balls in all the boxes together is 15. What is the ratio of the number of yellow balls in the box A to the number of blue balls in the box D ?

- a) 2 : 3
- b) 3 : 5
- c) 4 : 7
- d) 5 : 8

20. Total number of balls in all the boxes together is 200. Ratio of the total number of balls in the boxes A, B, C and D is 9 : 9 : 13 : 9 and the ratio of the red and blue balls in the box B is 2 : 3. What is the ratio of the number of yellow balls in the boxes A and C together to the number of red balls in the boxes B and D together ?

- a) 4 : 3
- b) 5 : 6
- c) 7 : 5
- d) 8 : 5

Direction (Question Nos. 21 - 25): The following line graph shows productions (in thousands) of two types (P and Q) of vehicles by a factory over the years 2009 to 2014.



Study the above line graph and answer the questions given below.

21. The total production of type P vehicles in the year 2009 and 2011 is what percentage of total production of type Q vehicles in the year 2010 and 2014 ?

- a) 81.25%
- b) 80%
- c) 75%
- d) 69.25%

22. What is the approximate percentage decrease in the production of type Q vehicles from the year 2010 and 2011 ?

- a) 16.3%
- b) 14.3%
- c) 12.5%
- d) 10.1%

23. The production of type Q vehicles in the year 2010 was approximately what percentage of type P vehicles in the year 2014 ?

- a) 45.5 %
- b) 54.5 %
- c) 60 %
- d) 75%

24. The ratio of the total production of type P vehicles to the total production of type Q vehicles over the years is:

- a) 48 : 41
- b) 41 : 48
- c) 8 : 5
- d) 5 : 8

25. In how many of the given years, was the production of type P vehicles of the company more than the average production of this type of vehicles in the given years ?

- a) 2
- b) 3
- c) 4
- d) 5

Direction (Question Nos. 26 - 30): The table given shows the number of students in four different colleges in four different departments.

College	CSE	EEE	ECE	ME	Total
A	?	440	?	680	?
B	580	?	280	?	1700
C	?	540	440	?	2000
D	360	560	?	460	?
Total	2000	?	?	2000	?

Study the given information carefully and answer the questions given below.

26. If the ratio of the number of students of CSE from the college A to the college C is 21 : 32, then the number of ME students from the college C is:

- a) 380
- b) 360
- c) 340
- d) 320

27. If the total number of EEE students from all the colleges together is 1900, then what is the number of ME students from the college B ?

- a) 420
- b) 440
- c) 460
- d) 480

28. If the ratio of the number of ME students from the college B to the college C is 24 : 19, then what is the number of CSE students from the college C?

- a) 580
- b) 620
- c) 640
- d) 660

29. If the total number of students from the college A is equal to the total number of ME students from all the colleges together, then the number of ECE students from the college C is approximately what percentage of the total number of students from the college A all the departments taken together ?

- a) 18%
- b) 20%
- c) 22%
- d) 24%

30. If the average number of ECE students from all the colleges together is 430 and the number of ECE students from the college D is equal to the number of ME students from the college A, then what is the ratio of the number of ECE students from the college A to the number of CSE students from the college D?

- a) 7 : 8
- b) 8 : 9
- c) 5 : 6
- d) 4 : 5

Direction (Question Nos. 31-35): A school has four sections A, B, C, D of Class-IX students. The results of half yearly and annual examinations are shown in the table given.

Result	No. of Students			
	Section A	Section B	Section C	Section D
Students failed in both Exams	28	23	17	27
Students failed in half-yearly but passed in Annual Exams	14	12	8	13
Students passed in half-yearly but failed in Annual Exams	6	17	9	15
Students passed in both Exams	64	55	46	76

Based on the above information, answer the following questions.

31. How many students are there in class-IX of the school ?

- a) 430
- b) 336
- c) 335
- d) 189

32. Which section has the minimum failure rate in half yearly examination ?

- a) Section A
- b) Section B
- c) Section C
- d) Section D

33. Which section has the maximum success rate in the annual examination ?

- a) Section A
- b) Section B
- c) Section C
- d) Section D

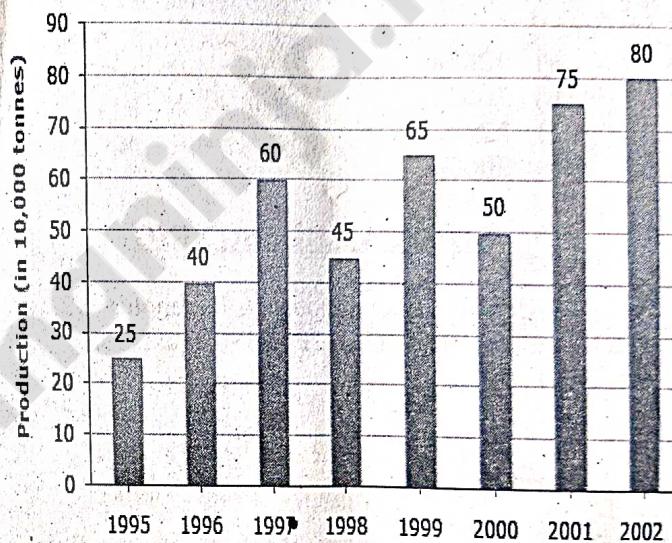
34. Which section has the maximum pass percentage in at least one of the two examinations ?

- a) Section A
- b) Section B
- c) Section C
- d) Section D

35. If the number of students passing an examination is considered as a criteria for comparison of difficulty level of two examinations, then which one of the following statements is true in this context ?

- a) Half yearly examinations were more difficult.
- b) Annual examinations were more difficult.
- c) Both the examinations had almost the same difficulty level.
- d) The two examinations cannot be compared for difficulty level.

Direction (Question Nos. 36 - 40): Production of Fertilizers by a Company (in 10000 tonnes) over the years is given in the bar graph.



Study the bar graph and answer the following questions based on it.

36. In how many of the given years was the production of fertilizers more than the average production from 1995-2002 ?

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

37. The average production of 1996 and 1997 was exactly equal to the average production of which of the following pairs of years ?

- a) 2000 and 2001
- b) 1999 and 2000
- c) 1998 and 2000
- d) 1995 and 2001

38. What was the percentage decline in the production of fertilizers from 1997 to 1998 ?

- a) $33\frac{1}{3}\%$
- b) 25%
- c) 21%
- d) 20%

39. In which year was the percentage increase in production, as compared to the previous year, the maximum?

- a) 2002
- b) 2001
- c) 1997
- d) 1996

40. What was the percentage increase in production of fertilizers in 2002 compared to that in 1995?

- a) 320%
- b) 300%
- c) 220%
- d) 200%

LOGICAL REASONING

41. If P denotes \div , Q denotes \times , R denotes $+$ and S denotes $-$, then $18Q12P4R5S6$ equals to:

- a) 36
- b) 53
- c) 59
- d) 65

42. Raj is standing in the middle of a square field. He starts walking diagonally to North – East. Then he turns right and reaches the far end of the field. Then he turns right and starts walking. In the midway he again turns right and starts walking. In halfway, he turns to his left and reaches a new far end. In what direction is Raj now?

- a) South-West
- b) North
- c) South
- d) North-West

43. Ajay ranked sixteenth from the top and twenty ninth from the bottom among those who passed an examination. Six boys did not participate in the competition and five failed in it. How many boys were there in the class?

- a) 44
- b) 50

- c) 55
- d) 58

44. In a row of girls, Rita and Monika occupy the ninth place from the right end and tenth place from the left end, respectively. If they interchange their places, Rita and Monika occupy seventeenth place from the right and eighteenth place from the left, respectively. How many girls are there in the row?

- a) 26
- b) 27
- c) 28
- d) 29

45. Kailash remembers that his brother Deepak's birthday falls after 20th May, but before 28th May. Geeta remembers that Deepak's birthday falls before 22nd May, but after 12th May. On what date Deepak's birthday falls?

- a) 20th May
- b) 21st May
- c) 22nd May
- d) Cannot be determined.

46. The missing number in the series:

196, 169, 144, _____, 100, 81 is:

- a) 111
- b) 121
- c) 131
- d) 141

47. Find the related number as expressed in given pair.

4 : 44 :: ? : 77

- a) 3
- b) 5
- c) 6
- d) 7

48. Find the missing letters in the series:

EQ, FS, HW, KA _____, TL.

- a) OF
- b) OB

- c) AL
- d) AM

49. Find the missing letters in the series:

RQP, ONM _____, IHG, FED.

- a) CDE
- b) LKI
- c) LKJ
- d) BAC

50. If 25th December 1990 is a Tuesday, then what day is 25th December, 2020?

- a) Sunday
- b) Friday
- c) Wednesday
- d) Monday

51. Select the related letter pair from the given options to fill in the question marks in the following:

FMR : ELQ :: ? : ?

- a) PEN : QFO
- b) ZEN : XCL
- c) TGA : SFZ
- d) SMP : UOR

52. Deepak, Rahul, Manoj and Kapil are brothers. Who is the heaviest?

- (I) Rahul is heavier than Deepak and Kapil, but lighter than Manoj.
- (II) Deepak is lighter than Rahul and Manoj, but heavier than Kapil.

In view of the above statements, choose the correct option.

- a) Statement (II) alone is sufficient, but statement (I) alone is not sufficient.
- b) Statement (I) alone is sufficient, but statement (II) alone is not sufficient.
- c) Either (I) or (II) is sufficient.
- d) Data in both the statements together are not sufficient.

53. If TUNE is coded as UUOE, LORD is coded as MOSD, then how is FLAME written in this code?

- a) GMANE
- b) FLBMF
- c) GMANF
- d) BNFLM

54. If HAT is coded as 8120 in certain code, then what is the code for BAN in this code?

- a) 2020
- b) 2021
- c) 2114
- d) 2124

55. If PINK is coded as 1691411, then RED will be coded as:

- a) 1963
- b) 1854
- c) 1853
- d) 1954

56. My birthday is on Sunday 21st May. On what day of the week will be Ram's birthday in the same year if Ram was born on 26th October?

- a) Saturday
- b) Wednesday
- c) Sunday
- d) Thursday

57. If in a certain language, MADRAS is coded as NBESBT, then which one of the following is the code for BOMBAY coded in that language?

- a) CPNCBX
- b) CPNCBZ
- c) CPOCBZ
- d) CQOCBZ

58. Arrange the following words in a meaningful sequence.

I. Sun II. Rain III. Child IV. Rainbow V. Happy

- a) III, II, I, IV, V
- b) II, I, IV, III, V
- c) II, I, III, IV, V
- d) IV, V, I, III, II

59. If 'White' is called 'Yellow', 'Yellow' is called 'Blue', 'Blue' is called 'Red', 'Red' is called 'Black', 'Black' is called 'Violet' and 'Violet' is called 'Green', then what would be the colour of light emitting from bulb?

- a) Blue
- b) Red
- c) Yellow
- d) Black

60. Consider the following statements.

- I. P is bigger than Q, but shorter than R.
- II. S is smaller than R and bigger than P.
- III. Q is greater than S.

If the statements I and II are true, then statement III will be:

- a) True
- b) Uncertain
- c) False
- d) None of the above

ARITHMETIC

61. The sum of two numbers is 55. If the H.C.F. and the L.C.M. of these numbers are 5 and 120, respectively, then the sum of the reciprocals of these two numbers is equal to:

- a) $\frac{55}{601}$
- b) $\frac{55}{120}$
- c) $\frac{11}{120}$
- d) $\frac{11}{120}$

62. A number consists of two digits. If the digits interchange places and the new number is added to the original number, then the resulting number will be divisible by:

- a) 11
- b) 9
- c) 5
- d) 3

63. The average monthly income of P and Q is Rs. 5,050. The average monthly income Q and R is Rs. 6,250 and the average monthly income of P and R is Rs. 5,200. Then what is the monthly income of P?

- a) Rs.3,500
- b) Rs.4,000
- c) Rs.4,050
- d) Rs.5,000

64. What is the angle between the minute hand and the hour hand of a clock, when the time is 8.30?

- a) 105°
- b) 80°
- c) 75°
- d) 60°

65. P fires 5 shots to Q's 3 shots, but P kills a bird only once in 3 shots, while Q kills a bird once in 2 shots. When Q has missed 27 times, then the

number of birds killed by P is:

- a) 30 birds
- b) 60 birds
- c) 72 birds
- d) 90 birds

66. What is the sum of all odd integers between 2 and 100 which are divisible by 3?

- a) 768
- b) 786
- c) 867
- d) 876

67. If the edge of a cube is increased by 30%, then what is the percentage of increase in its surface area?

- a) 71%
- b) 69%
- c) 60%
- d) 33%

68. How many times does the volume of a sphere increases, if its radius is doubled?

- a) 8 times
- b) 6 times
- c) 4 times
- d) 2 times

69. Three partners shared the profit in a business in the ratio 5 : 7 : 8. They had partnered for 14 months, 8 months and 7 months, respectively. What was the ratio of their investments?

- a) 5 : 7 : 8
- b) 20 : 49 : 64
- c) 38 : 28 : 21
- d) 14 : 13 : 25

70. P,Q,R can do a piece of work in 20, 30 and 60 days, respectively. In how many days can P do the work, if he is assisted by Q and R on every third day?

- a) 12 days
- b) 14 days
- c) 15 days
- d) 17 days

71. 100 oranges are bought at the rate of Rs.350 and sold at the rate of Rs.48 per dozen. The percentage of profit or loss is:

- a) $14\frac{2}{7}\%$ profit
- b) $14\frac{2}{7}\%$ loss

c) 15% profit
d) 15% loss

72. In how many different ways can the letters of the word "DETAIL" be arranged in such a way that the vowels occupy only the odd positions?

a) 60
b) 48
c) 40
d) 36

73. Seats for Mathematics, Physics and Biology in a school are in the ratio 5 : 7 : 8. There is a proposal to increase these seats by 40%, 50% and 75%, respectively. What will be the ratio of increased seats?

a) 6 : 7 : 8
b) 6 : 8 : 9
c) 2 : 3 : 4
d) 1 : 5 : 8

74. If a rectangular bin of 4 ft. long, 3 ft. wide and 2 ft. height is solidly packed with bricks whose dimensions are 8 inch by 4 inch by 2 inch, then the number of bricks in the bin is:

a) 286
b) 368
c) 584
d) 648

75. If 3 pumps, working 8 hours a day can empty a tank in 2 days, then how many hours a day must 4 pumps work to empty the tank in 1 day?

a) 12 hrs.
b) 11 hrs.
c) 10 hrs.
d) 8 hrs.

76. A farmer travelled a distance of 61 km in 9 hours. He travelled partly on foot at the rate of 4 km/hr and partly on bicycle at the rate of 9 km/hr. What is the distance travelled by the farmer on foot?

a) 14 km
b) 15 km
c) 16 km
d) 17 km

77. $88 \times 888 \times 8888 \div 88 \div 8 \times 101 = ?$

a) 98644859
b) 99644448

c) 99543348
d) 99643368

78. Simran started a software business by investing Rs.50,000. After six months, Nanda joined her with a capital of Rs.80,000. After 3 years, they earned a profit of Rs.24,500. What was Simran's share in the profit?

a) Rs.9,423
b) Rs.10,250
c) Rs.10,500
d) Rs.12,500

79. Sakshi can do a piece of work in 20 days. Tanya is 25% more efficient than Sakshi. The number of days taken by Tanya to do the same piece of work is:

a) 15 days
b) 16 days
c) 18 days
d) 25 days

80. If a train 125 metres long passes a man, running at 5 km/hr in the same direction in which the train is going in 10 seconds, then what is the speed of the train?

a) 45 km/hr.
b) 50 km/hr.
c) 54 km/hr.
d) 55 km/hr.

81. Two pipes can fill a tank in 20 minutes and 24 minutes, respectively. A waste pipe attached to the tank can empty 3 gallons per minute. If all the three pipes working together can fill the tank in 15 minutes, then what is the capacity of the tank?

a) 60 gallons
b) 100 gallons
c) 120 gallons
d) 1800 gallons

82. Robert is travelling on his bicycle. He has calculated that to reach a point P at 2 P.M., he needs to travel at 10 km/hr and to reach there at 12PM, he needs to travel at 15 km/hr. At what speed must he travel to reach the point P at 1 P.M.?

a) 11 km/hr
b) 12 km/hr
c) 13 km/hr
d) 14 km/hr

83. Thomas invested an amount of Rs. 13,900 divided in two different schemes P, Q at the simple interest rate of 14% p.a. and 11% p.a., respectively. If the total amount of simple interest earned in 2 years is Rs.3,508, then what was the amount invested in the scheme Q?

- a) Rs.6,400
- b) Rs.6,500
- c) Rs.7,200
- d) Rs.7,500

84. In a regular week, there are 5 working days with 8 working hours a day. A man gets Rs.2.40 per hour for regular work and Rs.3.20 per hour for overtime. If he earns Rs.432 in 4 weeks, then for how many hours does he work?

- a) 160 hrs
- b) 165 hrs
- c) 175 hrs
- d) 180 hrs

85. At what rate of compound interest per annum will a sum of Rs.1,200 become Rs.1,348.32 in 2 years?

- a) 5.5%
- b) 6%
- c) 6.5%
- d) 7%

COMPUTER AND INTERNET AWARENESS

86. The physical equipment of computer that can be seen and touched is called _____.

- a) Hardware
- b) Software
- c) Compiler
- d) DOS

87. A nibble is equal to _____ bits.

- a) 8
- b) 16
- c) 4
- d) 32

88. Which of the following of a computer is used for calculating and comparing?

- a) CU
- b) ALU
- c) Modem
- d) Memory

89. Microsoft Word is a _____ software.

- a) Application

- b) Compiler
- c) System
- d) Programming

90. By default, your document print is in _____ mode.

- a) Landscape
- b) Portrait
- c) Page Setup
- d) Print Preview

91. Which of the following is not a valid data type in MS-Excel?

- a) Number
- b) Character
- c) Label
- d) Date/ Time

92. The intersection of a column and a row in a worksheet is called:

- a) Column
- b) Address
- c) Value
- d) Cell

93. _____ is the keyboard shortcut to use to switch between open Excel windows.

- a) CTRL + TAB
- b) ALT + TAB
- c) CTRL + ALT + TAB
- d) None of the above

94. How can you sum the values in cells A1 through A10 in Excel?

- a) =SUM(A1:A10)
- b) =TOTAL(A1:A10)
- c) =ADD(A1:A10)
- d) =SUMMARY(A1:A10)

95. MS Access represents:

- a) Relational database
- b) Network model
- c) Object oriented model
- d) None of the above

96. Which of the following is not an operating system?

- a) Windows
- b) Linux
- c) Oracle
- d) DOS

97. Which connection is necessary for a computer to join the internet?

- a) internet society
- b) internet service provider
- c) different computer
- d) internet architecture board

98. What does “B2C” stand for in E-commerce?

- a) Business to Client
- b) Business to Commerce
- c) Business to Company
- d) Business to Consumer

99. Which of the following is a benefit of using chatbots in E-commerce?

- a) Increased shipping costs
- b) 24/7 customer support
- c) Decreased website traffic
- d) Limited product options

100. Microprocessors as switching devices are for which generation computers?

- a) First Generation
- b) Second Generation
- c) Third Generation
- d) Fourth Generation

