Total No. of Printed Pages: 21

## (DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU

## ARE ASKED TO DO SO)

SET-X

PG-EE-June, 2023

SUBJECT: Computer Science Group

		Sr. No		
Time: 11/4 Hours Roll No. (in figures)	Max. Marks : <b>100</b> (in words)	Total Questions: 100		
Name	Date of Birth			
Father's Name	Mother's Name			
Date of Examination				
(Signature of the Candidate)		(Signature of the Invigilator)		

### CANDIDATES MUST READ THE FOLLOWING INFORMATION/INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.

- 1. All questions are compulsory.
- 2. The candidates must return the question booklet as well as OMR Answer-Sheet to the Invigilate concerned before leaving the Examination Hall, failing which a case of use of unfairmeans / mis-behaviour will be registered against him / her, in addition to lodging of an FIR with the police. Further the answer-sheet of such a candidate will not be evaluated
- 3. Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
- 4. Question Booklet along with answer key of all the A, B, C & D code shall be got uploaded on the University Website immediately after the conduct of Entrance Examination. Candidates may raise valid objection/complaint if any, with regard to discrepancy in the question booklet/answer key within 24 hours of uploading the same on the University Website. The complaint be sent by the students to the Controller of Examinations by hand or through email. Thereafter, no complaint in any case, will be
- 5. The candidate must not do any rough work or writing in the OMR Answer-Sheet. Rough work, if any, may be done in the question booklet itself. Answers must not be ticked in the question booklet.
- 6. There will be no negative marking. Each correct answer will be awarded one full mark. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
- 7. Use only Black or Blue Ball Point Pen of good quality in the OMR Answer-Sheet.
- 8. Before answering the questions, the candidates should ensure that they have been supplied correct and complete booklet. Complaints, if any, regarding misprinting etc. will not be entertained 30 minutes after starting of the examination.

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(A)

1.	If $p \times q = p + q + \frac{p}{q}$ ,	what is the value of	8 × 2 ?	
	(1) 6	(2) 10	(3) 14	(4) 16
2.	If $0.13 \times p^2 = 13$ , th	en $p$ is equal to:		
	(1) 10	(2) 0.01	(3) 0.001	(4) 100
3.	If $A = \{5, 6\}$ and $B =$	{7, 8}, then what is t	he number of relation	ns from A to B?
	(1) 2 <sup>2</sup>	(2) 2 <sup>3</sup>	$(3) 2^4$	(4) 2 <sup>5</sup>
4.	If $A = \{1, 2, 3, 4, 5,\}$	7, 8, 9} and $B = \{2, 4,$	6, 7, 9}, then find nu	imber of proper subsets of
	$A \cap B$ ?			(4) 33
	(1) 14	(2) 15	(3) 32	(4) 00
5.	The magnitude of	the vector $6i + 2j + 3k$		(1) 8
	(1) 5	(2) 6	(3) 7	(4) 8
6.	$(\sin 30^{\circ} + \cos 30^{\circ}) -$	$(\sin 60^{\circ} + \cos 60^{\circ})$ :		(4) 1
	(1) 0	(2) 1	(3) 2	(4) -1
7	If $x = 7 - 4\sqrt{3}$ , the	en what is the value o	of $\sqrt{x} + \frac{1}{\sqrt{x}}$ ?	
	(1) 1	(2) 2	(3) 3	(4) 4
8	. The scalar produc	et of $5i + j - 3k$ and $3i$	-4j + 7k is:	40. 40
	(1) 15	(2) $-15$	(3) 10	(4) -10
9	. ( 1	vation of a ladder leavay from the wall. Th	aning against a wall he length of ladder is	is 60° and the foot of the
	(1) 22 m	(2) 4.6 m	(3) 7.8 m	(1)
10		6 red, 4 blue, 2 gre	een and 3 yellow mobability that either	arbles. If two marbles are both are green or both are

picked up at random, what is the probability that either both are green or both are

(2) 1/3

(4) None of the above

yellow?

(1) 5/91

(3) 4/105

11.	Choose	missing	pattern	
-----	--------	---------	---------	--

QPO, NML, KJI, -, EDC

- (1) HGF
- (2) CAB
- (3) JKM
- (4) GHD
- **12.** Choose the *correct* relation similar to following:

FISH: SCHOOL

(1) Herd: Peacock

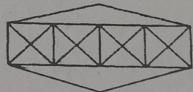
(2) Wolf: Pack

(3) Cow: Farm

- (4) Elephant: Jungle
- 13. Find the minimum number of straight lines required to make the given figure:



- (1) 15
- (2) 21
- (3) 18
- (4) 20
- 14. Find the minimum number of straight lines in the below figure :



(1) 20

- (2) 19
- (3) 17
- (4) 15
- **15.** Vineet is taller than Raman but shorter than Jyoti. Sumit is the shortest. Deepak taller than Sumit but shorter than Raman. Who is the tallest?
  - (1) Jyoti
- (2) Raman
- (3) Vineet
- (4) Deepak
- **16.** Select the missing letter from the given options:

В	J	I
E	K	В
G	U	?

(1) O

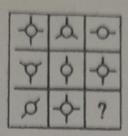
(2) M

(3) K

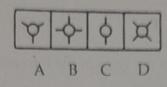
(4) P

17. Select the Answer figure that fits in the blank space in the given Problem figure:

Problem Figure



Answer Figures:



- (1) D
- (2) C
- (3) B
- (4) A

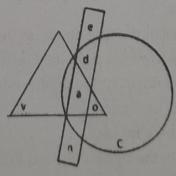
**18.** Select the option that depicts the correct mirror image of the given word when the mirror is placed horizontally below the word:

HEALTHY

- 1. HEALTHY
- 2. YHTLA3H
- HEALTHY .E
- 4. YHTLAEH

- (1) 1
- (2) 2
- (3) 3
- (4) 4

19. Which of the following part is a part of both circle and triangle?



- (1) e
- (2) v
- (3) 0
- (4) c

20. The proportion of male students and the proportion of vegetarian students in a school are given below. The school has a total of 800 students, 80% of whom are in the secondary section and rest equally divided between class 11 and 12:

What is the percentage of vegetarian student in class 11?

	Male (M)	Vegetarian (V)
Class 12	0.60	0.54
Class 11	0.55	0.50
Secondary Section	0.275 (288)	0.55(352)
Total	0.475	0.53

(1) 40

4

(2) 45

(3) 60

(4) 65

21. Answer the questions on the basis of the information given below:

Seven varsity basketball players A, B, C, D, E, F and G are to be honoured at a special luncheon. The players will be seated on the dais in a row. A and G have to leave the luncheon early and so must be seated at the extreme right. B will receive the most valuable player's trophy and so much be in the centre to facilitate presentation. C and D are bitter rivals and therefore, must be seated as far apart as possible.

Which of the following pairs cannot be seated together?

(1) B and D

(2) Cand F

(3) D and G

(4) E and A

22. Read the text and the statements carefully, and answer the questions .

Four people of different nationalities live on the same side of a street in four houses each of different colors. Each person has a different favorite drink. The following additional information is also known:

- A. The Englishman lives in the red house.
- B. The Italian drink tea.
- C. The Norwegian lives in the first house on the left.
- D. In the second house from the right they drink milk.
- E. The Norwegian lives adjacent to the blue house.
- F. The Spaniard drinks fruit juice.
- G. Tea is drunk in the blue house.
- H. The white house is to the right of the red house.

The Norwegian drinks:

(1) Milk

(2) Cocoa

(3) Tea

(4) Fruit Juice

23. Answer the questions on the basis of the information given below:

A, B, C, D, E and F are a group of friends. There are two house wives, one professor, one engineer, one accountant and one lawyer in the group. There are only two married couples in the group. The lawyer is married to D, who is a housewife. No women in the group are either an engineer or an accountant. C, the accountant, is married to F, who is a professor. A is married to housewife. E is not a housewife.

How many members of group are males?

- (1) 1
- (2) 3
- (3) 4
- (4) Cannot be determined
- **24.** The first and the last parts of the sentence are numbered 1 & 6. The rest of the sentence, is split into four parts and named P, Q, R and S. These four parts are not given in their proper order.

Read the sentence and find out which of the four combinations is correct?

- 1. It was obvious
- P. made by him
- Q. submitted at the meeting
- R. from the comments
- S. on the draft proposals
- 6. that he was not satisfied with them.
- (1) QRSP

(2) SQRP

(3) RPSQ

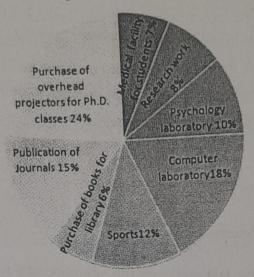
- (4) PSRQ
- **25.** In an examination the average marks of Rohit are 63. If he got 20 more marks in Science and 28 more marks in Mathematics, then his average would have been 69. Find the total number of subjects he studied:
  - (1) 7

(2) 8

- (3) 10
- (4) 12

### **26.** Study the following pie-chart carefully to answer these questions :

Total Expenditure: Rs. 60 Lacs



### Expenditure of funds by University for various purpose

What is the difference between the expenditure made by university for Publication of Journals and Psychology Laboratory?

- (1) Rs. 4 lacs
- (2) Rs. 3 lacs
- (3) Rs. 4.2 lacs
- (4) Rs. 3.8 lacs

## **27.** Study the following table and answer the questions:

Classification of 100 students based on the marks obtained by them in Physics and Chemistry in an Examination:

Subjects		Marks out of 50				
	40 and above	30 and above	20 and above	10 and above	0 and above	
Physics	9	32	80	92	100	
Chemistry	4	21	66	81	100	
Average (Aggregate)	7	27	73	87	100	

What is the difference between the number of students passed with 30 as cut-off marks in Chemistry and those passed with 30 as cut-off marks in aggregate?

- (1) 3
- (2) 4
- (3) 5
- (4) 6

Answer the questions based on the following information: 28.

A, B, C and D are to be seated in a row. But C and D cannot be together. Also B cannot be at the third place. If A and B are together, then which of the following must be necessarily true?

- (1) C is not at the first place
- (2) A is at the third place

(3) D is at the first place

(4) C is at the first place

Answer the questions on the basis of the following information:

Four families decided to attend the marriage ceremony of one of their colleagues. One family has no kids, while the others have at least one kid each. Each family with kids has at least one kid attending the marriage.

Given below some information about the families, and who reached when to attend the marriage:

The family with 2 kids came just before the family with no kids.

Shanti who does not have any kids reached just before Sridevi's family. Sunil and his wife reached last with their only kid.

Anil is not the husband of Joya.

Anil and Raj are fathers.

Sridevi's and Anita's daughters go to the same school.

Joya came before Shanti and met Anita when she reached the venue. Raman stays the farthest from the venue.

Raj said his son could not come because of his exams.

Name the correct pair of husband and wife:

- (1) Raj and Shanti
- (2) Sunil and Sridevi
- (3) Anil and Sridevi
- (4) Raj and Anita

**30.** Answer the questions on the basis of the information given below:

The seven basic symbols in a certain numeral system and their respective values are as follows:

$$I = 1$$
,  $V = 5$ ,  $X = 10$ ,  $L = 50$ ,  $C = 100$ ,  $D = 500$  and  $M = 1000$ 

In general, the symbols in the numeral system are read from left to right, starting with the symbol representing the largest value; the same symbol cannot occur continuously more than three times; the value of the numeral is the sum of the values of the symbols. For example, XXVII = 10 + 10 + 5 + 1 + 1 = 27. An exception to the left to right reading occurs when a symbol is followed immediately by a symbol of greater value; then, the smaller value is subtracted from the larger.

For example, XLVI = (50 - 10) + 5 + 1 = 46.

The value of the numeral MCMXCIX is:

- (1) 1999
- (2) 1899
- (3) 1989
- (4) 1889

**31.** Aman is 16th from the left end in a row of boys and Vivek is 18th from the right end. Gagan is 11th from Aman towards the right and 3rd from Vivek towards the right end. How many boys are there in the row?

- (1) 40
- (2) 48
- (3) 42
- (4) 41

**32.** How many 7's are there in the following series which are not immediately followed by 3 but immediately preceded by 8?

898762263269732872778737794

(1) 10

(2) 3

- (3) 2
- (4) 0

**33.** Manisha 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?

(1) 40

- (2) 48
- (3) 55

(4) 58

In a list, the rank of Mahesh was 16 from the top and whereas from bottom, the rank is 29. The list was about the passed-out students. Six students were failed due to non
participation and 5 were failed. Find the total number of students present in the class.

- (1) 55
- (2) 54
- (3) 53
- (4) 52

If  $\times$  means  $\div$ , – means  $\times$ ,  $\div$  means + and + means –, then  $(3 - 15 \div 19) \times 8 + 6 = ?$ 

- (1) 2
- (2) -1
- (3) 4
- (4) 8

A sum of Rs.1 890 has to be used to give 9 prizes to the customers of a super market for their overall academic purchases. If each prize is Rs. 30 less than its preceding price, what is the least value of the price?

- (1) 80
- (2) 85
- (3) 90
- (4) 95

If"A" denotes "subtracted from", "B" denotes "added to", "C" denotes "divided by", 37. "D" denotes "multiplied by", then which of the following statement is correct?

- (1) 13C13A13B13D13 = 157
- (2) 18C16D49A27B9 = 200
- (3) 3A12B16D17Cl = 163
- (4) 5C7A9D8B2 = 294

Statement: Should children be legally made responsible to take care of their parents 38. during their old age?

### Arguments:

- I. Yes. Such matter can only be solved by legal means.
- II. Yes. Only this will bring some relief to poor parents.
- (1) Only Argument I is strong
- (2) Only Argument II is strong
- (3) Either I or II is strong
- (4) Neither I nor II is strong

39. Statement: Should fashionable dresses be banned?

#### Arguments:

- I. Yes. Fashions keep changing and hence consumption of cloth increases.
- II. No. Fashionable clothes are a person's self-expression and therefore his/her fundamental right.
- (1) Only Argument I is strong
- (2) Only Argument II is strong
- (3) Either I or II is strong
- (4) Neither I nor II is strong
- **40.** *Statement*: Should 'computer knowledge' be made a compulsory subject for all the students at secondary school level?

#### Arguments:

- I. No, our need is 'bread' for everyone, we cannot follow western models.
- II. Yes. We cannot compete in the international market without equipping our children with computers.
- (1) Only Argument I is strong
- (2) Only Argument II is strong
- (3) Either I or II is strong
- (4) Neither I nor II is strong
- **41.** On reaching the railway station, you find that the train you wanted to catch is just to start and there is hardly any time for purchasing the ticket. The best thing for you is to:
  - (1) rush to the train rather than miss it and inform the T.T.I. at the next stoppage about your inability to purchase the ticket.
  - (2) rush to the train and perform your journey quietly.
  - (3) first purchase the ticket and then catch the train if it is there.
  - (4) miss the train rather than take the risk of boarding the moving train.

- **42.** Assertion: The problem solving ability, mental performance and memory of the employees of company C are deteriorating.
  - RI. Due to tight schedule at company C, the employees of the company are skipping their breakfast regularly.
  - RII. The job is physical in nature, but not mental.
  - (1) Only RI and not RII is the reason for the assertion.
  - (2) Only RII and not RI is the reason for the assertion.
  - (3) Either RI or RII, but not both, is the reason for the assertion.
  - (4) Neither RI nor RII is the reason for the assertion.
- **43.** Assertion: During polling season, new roads are constructed, there is twenty-four hours of power supply, good supply of water, and many other facilities are provided to the people.
  - RI. Political leaders want to be in the good books of the people.
  - RII. Polling season that is the right time to convert black money to white money in the name of party funds for the industries.
  - (1) Only RI and not RII is the reason for the assertion.
  - (2) Only RII and not RI is the reason for the assertion.
  - (3) Either RI or RII, but not both, is the reason for the assertion,
  - (4) Neither RI nor RII is the reason for the assertion.
- **44.** *Statements*: All Carrots are birds. Some telephones are Carrots. All bedsheets are telephone.

#### Conclusion:

- I. All bedsheet are birds
- II. Some bedsheet are birds
- III. Some birds are telephone
- IV. All telephone are birds
- (1) Only I follows

- (2) Only II follows
- (3) Only I and III follows
- (4) Only III follows

Conclusions:

Some stones are pearls.

	III. No stone is pe	arl.		
	(1) Only conclusion	on I is true		
	(2) Both conclusion	on I and III are true		
	(3) Either conclus	ion I or II is true		
	(4) None of the ab	oove		
46.	Nitin ranks 18th ir	a class of 49 student	ts. What is rank from	the last?
	(1) 31	(2) 18	(3) 32	(4) 19
47.		the number, as the		which are as far away from anged in ascending order
	(1) None	(2) One	(3) Two	(4) Three
48.	If the day before tomorrow?	yesterday was Sa	turday, what day	will fall on the day after
	(1) Friday	(2) Thursday	(3) Wednesday	(4) Tuesday
49.	right, what will be	e number 25673948 e the sum of the dig new arrangement?	gits which are fourt	cending order from left to th from the right and third
	(1) 10	(2) 9	(3) 8	(4) 6

(4) 6

45. Statements: Some pearls are gems. All gems are diamonds. No diamond is stone.

Some stones are corals.

II. Some corals being diamond is possibility.

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(A)

		1	13
50.	There are 6 persons A, B, C, D, E and F	who have different rank in class test exam.	
	Person A got last rank in class. E was than C, but he did not get second rank	not first in class test rank. B got more marks in class. E got more marks than only A. F was ranking, and B score less than D. The second	S
	D got which of the following possible m	narks ?	
	(1) 89 (2) 92	(3) 93 (4) 88	
51.	Which of the following is the computer	system's hardware component?	
	(1) RAM	(2) Keyboard	
	(3) Adobe Reader	(4) ROM	
52.	How many bits are there in 1 nibble?		
	(1) 4 (2) 8	(3) 16 (4) 24	
53.	What is the full form of USB?		
	(1) Universal Sequential Bus	(2) Unique Serial Bus	
	(3) Universal Serial Bus	(4) Unique Sequential Bus	
54	What one of the following is volatile m	nemory?	
	(1) RAM (2) ROM	(3) EPROM (4) PROM	
55	What is the length of character in ASC	TII codes ?	
55.	(1) 4 (2) 8	(3) 7 (4) 6	
	01.	11 ?	
56.	(1) 2 (2) 4	(3) 3 (4) 7	
57.		to	
	(1) 1 gigabyte is equal to 1024 kilobyt		
	(2) Decimal number system cannot co		
	(3) Hexadecimal system have 16 bits		
	(4) 5 0 0 0		

58	. What is the octal	representation of (01	1101)	?	
	(1) 35	(2) 45		34	(4) 54
59.	Which is the large	est unit of storage?			
00.	(1) Kb	(2) Mb	(3)	Zb	(4) Yb
60	How many values	s can be represented	by or	ne byte ?	
00.	(1) 512	(2) 64		256	(4) 8
61.					
	(1) Write Once, R				
	(2) Write Over, Ro				
	(3) Write Once, R				
	(4) Write Out, Rea	ad Many			
62.	What of the follow	ring is octal represen	tatior	(in 4 digits) of	decimal number (89
	(1) 3567	(2) 1600	(3)	1701	(4) 1654
63.	MSD refers to?				
	(1) Many Significa	ant Digit			
	(2) Most Significan	nt Decimal			
	(3) Multiple Signif	ficant Digit			
	(4) Most Significan	nt Digit			
4.	2's complement of -	-14 ?			
	(1) 11110001	(2) 10010010	(3)	11100001	(4) 01010110
					(4) 01010110
5.	Which of the follow	ring is invalid hexad	ecim	al?	
	(1) 0A23	(2) AB14	(3)	XA23	(4) 1234

36.	Which of the following is false?					
	(1) 2's complement of a 2's complement	ent of a number I the number itself.				
	00					
	s 0 and 1					
	(4) In 7-bit hamming code of BCD locations.	, the parity bits are placed at 1, 2 and				
57.	What is bootstrapping called?					
	(1) Hot Boot	(2) Cold Boot				
	(3) Cold hot strap	(4) Hot bootstrap				
68.	Which of the following is system softv	vare?				
	(1) Operating System	(2) Utilities				
	(3) Compiler	(4) All of the above				
69.	Which of the following payment card	has a microchip embedded in its surface?				
	(1) Debit Card	(2) Credit Card				
	(3) Metro Card	(4) Charge Card				
70.	Which of the following is a condition	that causes deadlock?				
	(1) Circular Wait	(2) Mutual Exclusion				
	(3) Hold and Wait	(4) All of the above				
71.	A user can get files from another con	nputer on the Internet by using:				
	(1) TELNET (2) HTTP	(3) FTP (4) UTP				
72	. Transport layer is at which level in T	CCP/ IP model ?				
	(1) 1 (2) 2	(3) 3 (4) 4				

	the state of the s	
	(1) <big></big>	
	(2) <large></large>	
	(3) <size></size>	
	(4) <font></font>	
7	4. Which among the following language is better for structured coding?	
	(1) BASIC (2) PASCAL (3) FORTAN (4) PL/1	
75	5. What type of scheduling is round-robin scheduling?	
	(1) Linear Data Scheduling	
	(2) Preemptive Scheduling	
	(3) Non-linear data scheduling	
	(4) Non-Preemptive Scheduling	
76.	ability to switch from one task to another.	28
	(1) Multiprogramming (2) Multithreading	
	(3) Multitasking (4) None of the above	
77.	Which html tag is used to scroll text in a Web Page?	
	(1) <scroll></scroll>	
	(2) <round></round>	
	(3) <marquee></marquee>	
	(4) <go></go>	
	(4) -80>-780>	
8	is single sequential flow of control in a program.	
(:	1) Process (2) Task (3) Thread (4) Structure	

P. T. O.

79.	Which among the following is the property of Unix OS?					
	(1) Multi-user		Time Sharing			
	(3) Multi-tasking		All of the above			
80.	Which of the following is no	ot a paired tag?				
	(1) <img/> (2) <u< th=""><th></th><th><b></b></th><th>(4)</th></u<>		<b></b>	(4)		
81.	Which among the following	g OS does <i>not</i> im	plement multitas	king truly?		
	(1) Windows NT	(2)	Windows 98			
	(3) Windows XP	(4)	MS DOS			
82.	In computers, subtraction is	s carried out by:				
	(1) 1's complement	(2)	9's complement			
	(3) 2's complement	(4)	10's complemen	t		
33.	Which of the following is no	ot the weighted	code?			
	(1) Decimal number system	n (2)	Excess-3 code			
	(3) Binary number system	(4)	None of the abo	ove		
34.	Cache memory acts betwee	n:				
	(1) RAM and ROM		CPU and RAM			
	(3) CPU and Hard Disk	(4)	None			
5.	101111 - 010101 = ?					
٠.	(1) 100100 (2) 011	(3)	011001	(4) 110011		
	(2)					
6.	Keyboard shortcut for redo  (1) $Ctrl + Z$ (2) $Ctr$	1-1	Ctrl + X	(4) Shift + Y		
	(1) Cur					
7.	1101 + 1100 in binary arithm	(0)	1001	(4) 0011		
	(1) 11001 (2) 110	(3)				

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(A)

88. The address technique employed l	by a CPU is:
(1) Direct	(2) Indirect
(3) Immediate	(4) All of the above
89. Keys to switch between application	ns running in Windows OS :
(1) Ctrl + Tab	(2) Alt + Tab
(3) Shift + Tab	(4) Fn + Tab
<b>90.</b> (10.10) × (01.01)	
(1) 011.0010	(2) 110.0011
(3) 001.1101	(4) None of the above
91. Fill in the blank:	
The river Thames flows L	London.
(1) through (2) on	(3) over (4) in
<b>92.</b> In the following choose the one which	ch best express the meaning of the idiom/phra
Talk through one's hat	
(1) To talk secretly	(2) Talk positively
(3) Talk good points	(4) Talk nonsense
<b>73.</b> Choose the word which best expresse VENT	es the meaning of the given word:
(1) End	(2) Storage
(3) Opening	(4) Past tense of Go
1. My father's dealings are open and abo	ove board.
(1) Mandatory	(2) Without any secret
(3) Very clear	(4) To everyone's liking

A	
95.	Choose the word which best expresses the meaning of the given word:
	COMBAT
	(1) Conflict (2) Quarrel (3) Feud (4) Fight
96.	Read the passage and choose most relevant answer:
	Erosion of America's farmland by wind and water has been a problem since settlers first put the prairies and grasslands under the plow in the nineteenth century. By the 1930s, more than 282 million acres of farmland were damaged by erosion. After 40 years of conservation efforts, soil erosion has accelerated due to new demands placed on the land by heavy crop production. In the years ahead, soil erosion and the pollution problems it causes are likely to replace petroleum scarcity as the nation's most critical natural resource problem.  As we understand from the reading, today, soil erosion in America
97.	(4) is worse in areas which have In the following question, a sentence has been broken into parts and the parts have been scrambled and numbered. Choose the <i>correct</i> order of these parts from the given alternatives.
	I. In a masterly way
	II. Munshi Premchands works, especially fiction
	III. Have been analysed and critiqued
98.	IV. In the next chapter  (1) II III I IV  (2) III II I IV  (3) IV II III I  (4) I II III IV  (5) III III I IV  (6) I II III I III III III III III III II
	P. T.

99. S1: A noise started above their heads.

P: But people did not take it seriously.

Q: It was to show everyone that there was something wrong.

R: It was a dangerous thing to do.

S: For, within minutes the ship began to sink.

S6: Nearly 200 lives were lost on the fateful day.

The proper sequence should be:

(1) PQSR

(2) PRQS

(3) QPRS

(4) QPSR

100. S1: She said on the phone that she would report for duty next day.

P: We waited for few days then we decided to go to her place.

Q: But she did not.

R: We found it locked.

S: Even after that we waited for her quite a few days.

S6: Eventually we reported to the Police.

The proper sequence should be:

(1) PRSQ

(2) QPSR

(3) OPRS

(4) SQPR

# B

## (DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

PG-EE-June, 2023

SET-X

SUBJECT: Computer Science Group 10554

Sr. No

Time: 11/4 Hours	Max. Marks: 100	Total Questions 100
Roll No. (in figures)	(in words)	
Name		
Father's Name	Mother's Name	
Date of Examination		
(Signature of the Candidate)		(Signature of the Invigilator)

## CANDIDATES MUST READ THE FOLLOWING INFORMATION/INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.

- All questions are compulsory.
- 2. The candidates must return the question booklet as well as OMR Answer-Sheet to the Invigilator concerned before leaving the Examination Hall, failing which a case of use of unfairmeans / mis-behaviour will be registered against him / her, in addition to lodging of an FIR with the police. Further the answer-sheet of such a candidate will not be evaluated.
- 3. Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
- 4. Question Booklet along with answer key of all the A, B, C & D code shall be got uploaded on the University Website immediately after the conduct of Entrance Examination. Candidates may raise valid objection/complaint if any, with regard to discrepancy in the question booklet/answer key within 24 hours of uploading the same on the University Website. The complaint be sent by the students to the Controller of Examinations by hand or through email. Thereafter, no complaint in any case, will be considered.
- The candidate must not do any rough work or writing in the OMR Answer-Sheet. Rough work, if any, may be done in the question booklet itself. Answers must not be ticked in the question booklet.
- There will be no negative marking. Each correct answer will be awarded one full mark.
  Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated
  as incorrect answer.
- 7. Use only Black or Blue Ball Point Pen of good quality in the OMR Answer-Sheet.
- 8. Before answering the questions, the candidates should ensure that they have been supplied correct and complete booklet. Complaints, if any, regarding misprinting etc. will not be entertained 30 minutes after starting of the examination.

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(B)

1.	A user can get files	s from another con	nputer on the Interr	et by using :	
	(1) TELNET	(2) HTTP	(3) FTP	(4) UTP	
2.	Transport layer is	at which level in T	CP/ IP model ?		
	(1) 1	(2) 2	(3) 3	(4) 4	
3.	Which tag is used	for displaying larg	ge font size ?		
	(1) <big><th>&gt;</th><th></th><th></th><th></th></big>	>			
	(2) <large><!--1</th--><th>LARGE&gt;</th><th></th><th></th><th></th></large>	LARGE>			
	(3) <size><th>Œ&gt;</th><th></th><th></th><th></th></size>	Œ>			
	(4) <font><th>ONT&gt;</th><th></th><th></th><th></th></font>	ONT>			
4.	Which among the	e following langua	ge is better for struc	tured coding?	
	(1) BASIC	(2) PASCAL	(3) FORTAN	(4) PL/1	
5.	What type of sch	eduling is round-r	obin scheduling ?		
	(1) Linear Data S	Scheduling	(2) Preemptiv	ve Scheduling	
	(3) Non-linear d	ata scheduling	(4) Non-Pree	mptive Scheduling	
6		more than one pr		for execution and prov	ides the
	(1) Multiprogra	mming	(2) Multithre	ading	
	(3) Multitasking	g	(4) None of t	he above	
7	7. Which html tag	is used to scroll te	xt in a Web Page ?	•	
	(1) <scroll><th>croll&gt;</th><th></th><th></th><th></th></scroll>	croll>			
	(2) <round><!--</th--><th>round&gt;</th><th></th><th></th><th></th></round>	round>			
	(3) <marquee></marquee>				
	(4) <go></go>	>			

	<b>8.</b> is sin	gle sequential flow	of control in a progra	im.
	(1) Process	(2) Task	(3) Thread	(4) Structure
	9. Which among t	he following is the	property of Unix OS	?
	(1) Multi-user		(2) Time Shari	ng
	(3) Multi-taskii	ng	(4) All of the a	bove
1	<b>0.</b> Which of the fol	lowing is <i>not</i> a pa	ired tag ?	
	(1) <img/>	(2) <u></u>	(3) <b></b>	(4)
1	<b>1.</b> Which of the following	lowing is the comp	outer system's hardwa	re component ?
	(1) RAM		(2) Keyboard	
	(3) Adobe Read	er	(4) ROM	
12	2. How many bits a	re there in 1 nibbl	e ?	
	(1) 4	(2) 8	(3) 16	(4) 24
13	. What is the full fo	orm of USB?		
	(1) Universal Sec	quential Bus		
	(2) Unique Serial	Bus		
	(3) Universal Ser	ial Bus		
	(4) Unique Seque	ntial Bus		
14.	What one of the fo	llowing is volatile	e memory ?	
	(1) RAM	(2) ROM	(3) EPROM	(4) PROM
15.	What is the length	of character in AS	CII codes ?	
	(1) 4	(2) 8	(3) 7	(4) 6
16.	What is the value of	f binary number (	011?	
	(1) 2	(2) 4	(3) 3	(4) 7

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(B)

	17. Which of the for	owing is true ;				
	(1) 1 gigabyte is	equal to 1024 kilobyte	<u> </u>			
	(2) Decimal num	nber system cannot cor	ntair	binary digits		
	(3) Hexadecimal	system have 16 bits				
	(4) None					
1	8. What is the octal i	representation of (011	101)	?		
	(1) 35	(2) 45	(3)	34	(4)	54
19	<b>9.</b> Which is the large	st unit of storage?				
	(1) Kb	(2) Mb	(3)	Zb,	(4)	Yb
20	. How many values	can be represented b	y on	ne byte ?		
	(1) 512	(2) 64	(3)	256	(4)	8
21.	Gagan is 11th from		e rig			8th from the right end. vek towards the right
	(1) 40	(2) 48	(3)	42	(4)	41
22.	How many 7's are by 3 but immediate		ng se	eries which are	not	immediately followed
	898762263269	732872778737	79	4		
	(1) 10	(2) 3	(3)	2	(4)	0
3.		n examination. Six b	oys	did not particip		m the bottom among in the competition and

(2) 48 (3) 55

22.

23.

(1) 40

(4) 58

In a list, the rank of Mahesh was 16 from the top and whereas from bottom, the rank is 29. The list was about the passed-out students. Six students were failed due to non
participation and 5 were failed. Find the total number of students present in the class.

(1) 55

(2) 54

(3) 53

(4) 52

**25.** If × means ÷, – means ×, ÷ means + and + means –, then  $(3 - 15 \div 19) \times 8 + 6 = ?$ 

(1) 2

(2) -1

(3) 4

(4) 8

**26.** A sum of Rs.1 890 has to be used to give 9 prizes to the customers of a super market for their overall academic purchases. If each prize is Rs. 30 less than its preceding price, what is the least value of the price?

(1) 80

(2) 85

(3) 90

(4) 95

**27.** If "A" denotes "subtracted from", "B" denotes "added to", "C" denotes "divided by", "D" denotes "multiplied by", then which of the following statement is *correct*?

(1) 13C13A13B13D13 = 157

(2) 18C16D49A27B9 = 200

(3) 3A12B16D17Cl = 163

(4) 5C7A9D8B2 = 294

**28.** *Statement*: Should children be legally made responsible to take care of their parents during their old age?

### Arguments:

- I. Yes. Such matter can only be solved by legal means.
- II. Yes. Only this will bring some relief to poor parents.
- (1) Only Argument I is strong
- (2) Only Argument II is strong
- (3) Either I or II is strong
- (4) Neither I nor II is strong

**29.** *Statement*: Should fashionable dresses be banned?

#### Arguments:

- I. Yes. Fashions keep changing and hence consumption of cloth increases.
- II. No. Fashionable clothes are a person's self-expression and therefore his/her fundamental right.
- (1) Only Argument I is strong
- (2) Only Argument II is strong
- (3) Either I or II is strong
- (4) Neither I nor II is strong
- **30.** Statement: Should 'computer knowledge' be made a compulsory subject for all the students at secondary school level?

#### Arguments:

- I. No, our need is 'bread' for everyone, we cannot follow western models.
- II. Yes. We cannot compete in the international market without equipping our children with computers.
- (1) Only Argument I is strong
- (2) Only Argument II is strong
- (3) Either I or II is strong
- (4) Neither I nor II is strong
- **31.** Choose missing pattern:

QPO, NML, KJI, -, EDC

- (1) HGF
- (2) CAB
- (3) JKM
- (4) GHD
- **32.** Choose the *correct* relation similar to following:

FISH: SCHOOL

(1) Herd: Peacock

(2) Wolf : Pack

(3) Cow : Farm

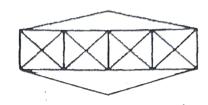
(4) Elephant: Jungle

**33.** Find the minimum number of straight lines required to make the given figure :



- (1) 15
- (2) 21
- (3) 18
- **(4)** 20

**34.** Find the minimum number of straight lines in the below figure :



- (1) 20
- (2) 19
- (3) 17
- (4) 15

**35.** Vineet is taller than Raman but shorter than Jyoti. Sumit is the shortest. Deepak is taller than Sumit but shorter than Raman. Who is the tallest?

(1) Jyoti

(2) Raman

(3) Vineet

(4) Deepak

**36.** Select the missing letter from the given options:

В	J	I
Е	K	В
G	U	?

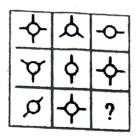
(1) O

(2) M

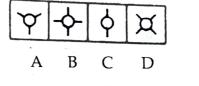
(3) K

(4) P

**37.** Select the Answer figure that fits in the blank space in the given Problem figure : *Problem Figure* 



Answer Figures:



- (1) D
- (2) C
- (3) B
- (4) A
- **38.** Select the option that depicts the correct mirror image of the given word when the mirror is placed horizontally below the word :

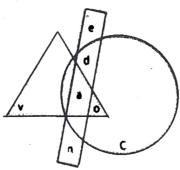
HEALTHY

- 1. HEVILHA
- 2. YHTLA3H
- HEALTHY &
- 4. YHTLAEH

(1) 1

(2) 2

- (3) 3
- (4) 4
- **39.** Which of the following part is a part of both circle and triangle?



(1) e

(2) v

(3) o

(4) c

**40.** The proportion of male students and the proportion of vegetarian students in a school are given below. The school has a total of 800 students, 80% of whom are in the secondary section and rest equally divided between class 11 and 12:

What is the percentage of vegetarian student in class 11?

	Male (M)	Vegetarian (V)
Class 12	0.60	0.54
Class 11	0.55	0.50
Secondary Section	0.275 (288)	0.55(352)
Total	0.475	0.53

	Total	0.475		0.53		
	(1) 40 (	2) 45	(3)	60	(4)	65
41.	Fill in the blank :					
	The river Thames flow	ws Lon	don.			
	( )	2) on		over	(4)	
42.	In the following choo	se the one which	best e	express the mear	ning	of the idiom/phrase:
	Talk through one's ha	t				
	(1) To talk secretly		(2)	Talk positively		
	(3) Talk good points		(4)	Talk nonsense		
43.	Choose the word whi	ch best expresses	the n	neaning of the gi	iven	word:
	VENT					
		2) Storage	(3)	Opening	(4)	Past tense of Go
44.	My father's dealings a	re open and abov	e bo	ard.		
	(1) Mandatory		(2)	Without any se	cret	
	(3) Very clear		` '	To everyone's l		
45.	Choose the word which	ch best expresses	the n	neaning of the g	iver	word:

(3) Feud

(4) Fight

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(B)

(2) Quarrel

**COMBAT** 

(1) Conflict

**46.** Read the passage and choose most relevant answer :

Erosion of America's farmland by wind and water has been a problem since settlers first put the prairies and grasslands under the plow in the nineteenth century. By the 1930s, more than 282 million acres of farmland were damaged by erosion. After 40 years of conservation efforts, soil erosion has accelerated due to new demands placed on the land by heavy crop production. In the years ahead, soil erosion and the pollution problems it causes are likely to replace petroleum scarcity as the nation's most critical natural resource problem.

As we understand from the reading, today, soil erosion in America ......

- (1) is worse than it was in the nineteenth century
- (2) is the most critical problem that the nation faces
- (3) causes humans to place new demands on the land
- (4) is worse in areas which have a lot of petroleum production
- **47.** In the following question, a sentence has been broken into parts and the parts have been scrambled and numbered. Choose the *correct* order of these parts from the given alternatives.
  - I. In a masterly way
  - II. Munshi Premchands works, especially fiction
  - III. Have been analysed and critiqued
  - IV. In the next chapter
  - (1) II III I IV
- (2) III II I IV
- (3) IV II III I
- (4) I II III IV
- 48. Fill in the blank with the most appropriate word from the options given below:

A good driver will be very careful before carrying out a complex ......

- (1) Movement
- (2) Manoeuvre
- (3) Motion
- (4) Movement

- **49.** S1: A noise started above their heads.
  - P: But people did not take it seriously.
  - Q: It was to show everyone that there was something wrong.
  - R: It was a dangerous thing to do.
  - S: For, within minutes the ship began to sink.

S6: Nearly 200 lives were lost on the fateful day.

The proper sequence should be:

- (1) PQSR
- (2) PRQS
- (3) QPRS
- (4) QPSR

10								
50	<b>50.</b> S1: She said on the phone that she would report for duty next day.							
	P: We waited for few days then we decided to go to her place.							
	Q : But she did not.							
	R: We found it locked.							
	S: Even after that we waited for her quite a few days.							
	S6: Eventually we reported to the Police.							
	The proper sequ	ence should be :						
	(1) PRSQ	(2) QPSR	(3) QPRS	(4) SQPR				
51.	. What is the full f	orm of WORM?						
	(1) Write Once,	Read More						
	(2) Write Over, 1							
	(3) Write Once,							
	(4) Write Out, Re							
<b>52</b> .								
	(1) 3567		entation (in 4 digits)	of decimal number (896				
		(2) 1600	(3) 1701	(4) 1654				
53.	MSD refers to?							
	(1) Many Signific	cant Digit						
	(2) Most Significa	ant Decimal						
	(3) Multiple Sign	ificant Digit						
	(4) Most Significa	ant Digit						
54.	■ 2's complement of −14?							
	(1) 11110001	(2) 10010010	(3) 11100001	(4) 01010110				
55.	Which of the follow	wing is invalid hex	adecimal?					
	(1) 0A23	(2) AB14	(3) XA23	(4) 1234				
PG-EE-	June, 2023/(Comp	ıter Science Group	)(SET-X)/(B)					

5	<b>6</b> . <i>V</i>	Which of the following is <i>false</i> ?							
	(1	1) 2's complement of a 2's complement	of a	number I the number itself.					
	(2	2) Excess-3 code for 369 is 01111001110	00						
	(3	(3) 1-bit gray code has two code words 0 and 1							
	(4	) In 7-bit hamming code of BCD, locations.	the	parity bits are placed at 1, 2 and 4					
57	'. W	hat is bootstrapping called?							
	(1)	Hot Boot	(2)	Cold Boot					
	(3)	Cold hot strap	(4)	Hot bootstrap					
58.	. W	hich of the following is system softwa	re?						
	(1)	Operating System	(2)	Utilities					
	(3)	Compiler	(4)	All of the above					
59.	Wh	nich of the following payment card ha	as a	microchip embedded in its surface ?					
	(1)	Debit Card	(2)	Credit Card					
	(3)	Metro Card	(4)	Charge Card					
60.	. Which of the following is a condition that causes deadlock?								
	(1)	Circular Wait	(2)	Mutual Exclusion					
	(3)	Hold and Wait	(4)	All of the above					
61.	<b>61.</b> Which among the following OS does <i>not</i> implement multitasking truly?								
	(1)	Windows NT	(2)	Windows 98					
	(3)	Windows XP	(4)	MS DOS					
62.	2. In computers, subtraction is carried out by :								
	(1)	1's complement	(2)	9's complement					
	(3)	2's complement	(4)	10's complement					

6	<b>3.</b> Which of the following								
	(1) Decimal nun		(2) Excess-3 code						
	(3) Binary numb	er system	(4) None of the a	bove					
64	4. Cache memory a	cts between :							
	(1) RAM and RC		(2) CPU and RAI	М					
	(3) CPU and Har	d Disk	(4) None						
65	i. 101111 – 010101 =	= ?							
	(1) 100100	(2) 011010	(3) 011001	(4) 110011					
66	. Keyboard shortcu	it for redo :							
	(1) Ctrl +Z	(2) Ctrl+ Y	(3) Ctrl + X	(4) Shift + Y					
67.	(-, -)								
	(1) 11001	(2) 1100	(3) 1001	(4) 0011					
68.	(1) 1001								
	(1) Direct	1 omproyed b	(2) Indirect						
	(3) Immediate		(4) All of the above	V.P.					
69.									
	(1) Ctrl + Tab	(2) Alt + Tab							
70.	$(10.10) \times (01.01)$	(=) 1111 / 140	(3) Shift + Tab	(4) Fn + Tab					
. 0.	(1) 011.0010	(2) 110.0011	(3) 001 1101	(1) N					
71.			(3) 001.1101	(4) None of the above					
, ,,	start and there is h	On reaching the railway station, you find that the train you wanted to catch is just to start and there is hardly any time for purchasing the ticket. The best thing for you is o:							
	(1) rush to the train rather than miss it and inform the T.T.I. at the next stopp about your inability to purchase the ticket.								
	(2) rush to the train and perform your journey quietly.								

(3) first purchase the ticket and then catch the train if it is there.

(4) miss the train rather than take the risk of boarding the moving train.

## PG-EE-June, 2023/(Computer Science Group)(SET-X)/(B)

- **72.** Assertion: The problem solving ability, mental performance and memory of the employees of company C are deteriorating.
  - RI. Due to tight schedule at company C, the employees of the company are skipping their breakfast regularly.
  - RII. The job is physical in nature, but not mental.
  - (1) Only RI and not RII is the reason for the assertion.
  - (2) Only RII and not RI is the reason for the assertion.
  - (3) Either RI or RII, but not both, is the reason for the assertion.
  - (4) Neither RI nor RII is the reason for the assertion.
- **73.** Assertion: During polling season, new roads are constructed, there is twenty-four hours of power supply, good supply of water, and many other facilities are provided to the people.
  - RI. Political leaders want to be in the good books of the people.
  - RII. Polling season that is the right time to convert black money to white money in the name of party funds for the industries.
  - (1) Only RI and not RII is the reason for the assertion.
  - (2) Only RII and not RI is the reason for the assertion.
  - (3) Either RI or RII, but not both, is the reason for the assertion.
  - (4) Neither RI nor RII is the reason for the assertion.
- **74.** Statements: All Carrots are birds. Some telephones are Carrots. All bedsheets are telephone.

#### Conclusion:

- I. All bedsheet are birds
- II. Some bedsheet are birds
- III. Some birds are telephone
- IV. All telephone are birds
- (1) Only I follows

- (2) Only II follows
- (3) Only I and III follows
- (4) Only III follows

Conclusions:

III. No stone is pearl.

(1) Only conclusion I is true

(2) Both conclusion I and III are true

Some stones are pearls.

	ranks 18th in a class of 49 students. What is rank from the last?						
76.							
	(1) 31	(2) 18	(3) 32	(4) 19			
77. How many such digits are there in the number 7346285 which are as far away the beginning of the number, as they will be when arranged in ascending within the number?							
	(1) None	(2) One	(3) Two	(4) Three			
78.	If the day before yesterday was Saturday, what day will fall on the day after tomorrow?						
	(1) Friday	(2) Thursday	(3) Wednesday	(4) Tuesday			
79.	If the digits in the number 25673948 are arranged in ascending order from left to right, what will be the sum of the digits which are fourth from the right and third from the left in the new arrangement?						
	(1) 10	(2) 9	(3) 8	(4) 6			
G-EE-June, 2023/(Computer Science Group)(SET-X)/(B)							

**75.** Statements: Some pearls are gems. All gems are diamonds. No diamond is  $sto_{h_{\ell}}$ 

Some stones are corals.

II. Some corals being diamond is possibility.

80. There are 6 persons A, B, C, D, E and F who have different rank in class test exam.

Person A got last rank in class. E was not first in class test rank. B got more marks than C, but he did not get second rank in class. E got more marks than only A. F was situated between D and B in class test ranking, and B score less than D. The second highest person got 92 marks.

D got which of the following possible marks?

- (1) 89
- (2) 92
- (3) 93
- (4) 88

81. Answer the questions on the basis of the information given below:

Seven varsity basketball players A, B, C, D, E, F and G are to be honoured at a special luncheon. The players will be seated on the dais in a row. A and G have to leave the luncheon early and so must be seated at the extreme right. B will receive the most valuable player's trophy and so much be in the centre to facilitate presentation. C and D are bitter rivals and therefore, must be seated as far apart as possible.

Which of the following pairs cannot be seated together?

(1) B and D

(2) C and F

(3) D and G

(4) E and A

82. Read the text and the statements carefully, and answer the questions.

Four people of different nationalities live on the same side of a street in four houses each of different colors. Each person has a different favorite drink. The following additional information is also known:

- A. The Englishman lives in the red house.
- B. The Italian drink tea.
- C. The Norwegian lives in the first house on the left.
- D. In the second house from the right they drink milk.
- E. The Norwegian lives adjacent to the blue house.
- F. The Spaniard drinks fruit juice.
- G. Tea is drunk in the blue house.
- H. The white house is to the right of the red house.

The Norwegian drinks:

(1) Milk

(2) Cocoa

(3) Tea

(4) Fruit Juice

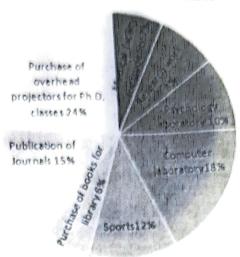
85.

	4 decouples of the basis of the mornisms
8-	A, B, C, D, E and F are a group of friends. There are two house wives, one professor, one engineer, one accountant and one lawyer in the group. There are only two married couples in the group. The lawyer is married to D, who is a housewife. No women in the group are either an engineer or an accountant. C, the accountant, is married to F, who is a professor. A is married to housewife. E is not a housewife. How many members of group are males?  (1) 1  (2) 3  (3) 4  (4) Cannot be determined
•	and the last parts of the sentence are numbered 1 & o. The rest of the
	sentence, is split into four parts and named P, Q, R and S. These four parts are not
	given in their proper order.
	Read the sentence and find out which of the four combinations is correct?
	1. It was obvious
	P. made by him
	Q. submitted at the meeting
	R. from the comments
	S. on the draft proposals
	6. that he was not satisfied with them.
	(1) QRSP (2) SQRP
	(3) RPSQ (4) PSRQ
	In an examination the average marks of Rohit are 63. If he got 20 more marks in Science and 28 more marks in Mathematics, then his average would have been 69. Find the total number of subjects he studied:
	(1) 7 (2) 8 (3) 10 (4) 12

**83.** Answer the questions on the basis of the information given below:

86. Study the following pie-chart carefully to answer these questions

Total Expenditure: Rs. 60 Lacs



### Expenditure of funds by University for various purpose

What is the difference between the expenditure made by university for Publication of Journals and Psychology Laboratory?

- (1) Rs. 4 lacs
- (2) Rs. 3 lacs
- (3) Rs. 4.2 lacs
- (4) Rs. 3.8 lacs
- **87.** Study the following table and answer the questions:

Classification of 100 students based on the marks obtained by them in Physics and Chemistry in an Examination:

Subjects		Marks out of 50					
	40 and above	30 and above	20 and above	10 and above	0 and above		
Physics	9	32	80	92	100		
Chemistry	4	21	66	81	100		
Average (Aggregate)	7	27	73	87	100		

What is the difference between the number of students passed with 30 as cut-off marks in Chemistry and those passed with 30 as cut-off marks in aggregate?

(1) 3

- (2) 4
- (3) 5
- (4) 0

**88.** Answer the questions based on the following information:

A, B, C and D are to be seated in a row. But C and D cannot be together. Also B cannot be at the third place. If A and B are together, then which of the following must be necessarily *true*?

- (1) C is not at the first place
- (2) A is at the third place

(3) D is at the first place

(4) C is at the first place

### **89.** Answer the questions on the basis of the following information:

Four families decided to attend the marriage ceremony of one of their colleagues. One family has no kids, while the others have at least one kid each. Each family with kids has at least one kid attending the marriage.

Given below some information about the families, and who reached when to attend the marriage:

The family with 2 kids came just before the family with no kids.

Shanti who does not have any kids reached just before Sridevi's family. Sunil and his wife reached last with their only kid.

Anil is not the husband of Joya.

Anil and Raj are fathers.

Sridevi's and Anita's daughters go to the same school.

Joya came before Shanti and met Anita when she reached the venue. Raman stays the farthest from the venue.

Raj said his son could not come because of his exams.

Name the correct pair of husband and wife:

- (1) Raj and Shanti
- (2) Sunil and Sridevi
- (3) Anil and Sridevi
- (4) Raj and Anita

Answer the questions on the basis of the information given below:

The seven basic symbols in a certain numeral system and their respective values are as follows:

$$1 = 1$$
,  $V = 5$ ,  $X = 10$ ,  $L = 50$ ,  $C = 100$ ,  $D = 500$  and  $M = 1000$ 

In general, the symbols in the numeral system are read from left to right, starting with the symbol representing the largest value; the same symbol cannot occur continuously more than three times; the value of the numeral is the sum of the values of the symbols. For example, XXVII = 10 + 10 + 5 + 1 + 1 = 27. An exception to the left to right reading occurs when a symbol is followed immediately by a symbol of greater value; then, the smaller value is subtracted from the larger.

For example, XLVI = (50 - 10) + 5 + 1 = 46.

The value of the numeral MCMXCIX is:

- (4) 1889 (3) 1989 (2) 1899 (1) 1999
- **91.** If  $p \times q = p + q + \frac{p}{q}$ , what is the value of  $8 \times 2$ ?
  - (1) 6If  $0.13 \times p^2 = 13$ , then *p* is equal to :
  - (2) 0.01 (1) 10
- (3) 0.001

(3) 14

(4) 100

(4) 16

- If  $A = \{5, 6\}$  and  $B = \{7, 8\}$ , then what is the number of relations from A to B? 93.
  - $(1) 2^2$

92.

B

90.

 $(2) 2^3$ 

(2) 10

- $(3) 2^4$
- $(4) 2^5$
- If  $A = \{1, 2, 3, 4, 5, 7, 8, 9\}$  and  $B = \{2, 4, 6, 7, 9\}$ , then find number of proper subsets of 94.  $A \cap B$ ?
  - (1) 14
- (2) 15
- (3) 32
- (4) 33

- The magnitude of the vector 6i + 2j + 3k: 95.
  - (1) 5
- (2) 6
- (3) 7
- (4) 8

- $(\sin 30^\circ + \cos 30^\circ) (\sin 60^\circ + \cos 60^\circ)$ : 96.
  - (1) 0
- (2) 1
- (3) 2
- (4) -1

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(B)

P. T. O.

97.	If $x = 7 - 4\sqrt{3}$ , then			
	(1) 1	(2) 2	(3) 3	(4) 4

- **98.** The scalar product of 5i + j 3k and 3i 4j + 7k is:
  - (1) 15
- (2) -15
- (3) 10
- (4) -10
- **99.** The angle of elevation of a ladder leaning against a wall is 60° and the foot of the ladder is 4.6 m away from the wall. The length of ladder is :
  - (1) 2.3 m
- (2) 4.6 m
- (3) 7.8 m
- (4) 9.2 m
- **100.** An urn contains 6 red, 4 blue, 2 green and 3 yellow marbles. If two marbles are picked up at random, what is the probability that either both are green or both are yellow?
  - (1) 5/91

(2) 1/3

(3) 4/105

(4) None of the above

Total No. of Printed Pages: 21

### (DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU

# C

# PG-EE-June, 2023

SET-X

SUBJECT: Computer Science Group

10551

		01, 110
Time: 11/4 Hours	Max. Marks: 100	Total Questions: 100
Roll No. (in figures)	(in words)	
Name	Date of Birth	
Father's Name	Mother's Name	
Date of Examination		
(Signature of the Candidate)		(Signature of the Invigilator)

## CANDIDATES MUST READ THE FOLLOWING INFORMATION/INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.

- 1. All questions are compulsory.
- 2. The candidates must return the question booklet as well as OMR Answer-Sheet to the Invigilator concerned before leaving the Examination Hall, failing which a case of use of unfairmeans / mis-behaviour will be registered against him / her, in addition to lodging of an FIR with the police. Further the answer-sheet of such a candidate will not be evaluated.
- 3. Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
- 4. Question Booklet along with answer key of all the A, B, C & D code shall be got uploaded on the University Website immediately after the conduct of Entrance Examination. Candidates may raise valid objection/complaint if any, with regard to discrepancy in the question booklet/answer key within 24 hours of uploading the same on the University Website. The complaint be sent by the students to the Controller of Examinations by hand or through email. Thereafter, no complaint in any case, will be considered.
- 5. The candidate *must not* do any rough work or writing in the OMR Answer-Sheet. Rough work, if any, may be done in the question booklet itself. Answers *must not* be ticked in the question booklet.
- 6. There will be no negative marking. Each correct answer will be awarded one full mark. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
- 7. Use only Black or Blue Ball Point Pen of good quality in the OMR Answer-Sheet.
- 8. Before answering the questions, the candidates should ensure that they have been supplied correct and complete booklet. Complaints, if any, regarding misprinting etc. will not be entertained 30 minutes after starting of the examination.

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(C)

SEAT

- 1. On reaching the railway station, you find that the train you wanted to catch is just to start and there is hardly any time for purchasing the ticket. The best thing for you is to:
  - (1) rush to the train rather than miss it and inform the T.T.I. at the next stoppage about your inability to purchase the ticket.
  - (2) rush to the train and perform your journey quietly.
  - (3) first purchase the ticket and then catch the train if it is there.
  - (4) miss the train rather than take the risk of boarding the moving train.
- Assertion: The problem solving ability, mental performance and memory of the employees of company C are deteriorating.
  - RI. Due to tight schedule at company C, the employees of the company are skipping their breakfast regularly.
  - RII. The job is physical in nature, but not mental.
  - (1) Only RI and not RII is the reason for the assertion.
  - (2) Only RII and not RI is the reason for the assertion.
  - (3) Either RI or RII, but not both, is the reason for the assertion.
  - (4) Neither RI nor RII is the reason for the assertion.
- **3.** Assertion: During polling season, new roads are constructed, there is twenty-four hours of power supply, good supply of water, and many other facilities are provided to the people.
  - RI. Political leaders want to be in the good books of the people.
  - RII. Polling season that is the right time to convert black money to white money in the name of party funds for the industries.
  - (1) Only RI and not RII is the reason for the assertion.
  - (2) Only RII and not RI is the reason for the assertion.
  - (3) Either RI or RII, but not both, is the reason for the assertion.
  - (4) Neither RI nor RII is the reason for the assertion.

	(	Conclusion:				
	1	. All bedshe	et are birds		-1	grant and as the collection
	I	I. Some beds	heet are birds			
	n	I. Some birds	s are telephone			
	L	V. All telepho	one are birds		Total Control	
	(1	) Only I follo	ows	(2	Only II follow	vs
	(3	) Only I and	III follows	(4	Only III follow	ws
	5. St		ome pearls are ger		ems are diamo	onds. No diamond is stone.
	Co	onclusions:	and the second			
	I.	Some stone	s are pearls.			stigliq at a little at the state of
	П.	Some corals	being diamond is	possibili	ty.	Ballines to sterio 1
	III.	No stone is	pearl.			
	(1)	Only conclu	sion I is true			I Par II sould
	(2)	Both conclus	ion I and III are tri	ue		
	(3)	Either conclu	ision I or II is true			a 190 % location des
	(4)	None of the	above	n boom		
6.	Niti	n ranks 18th	in a class of 49 stud	dents. W	hat is rank from	n the last?
	(1) 3	31	(2) 18	(3)	32	(4) 19
7.	the b	many such beginning of in the numbe	the number, as	the num	nber 7346285 w l be when arr	which are as far away from anged in ascending order
	(1) N	Jone	(2) One	(3)	Two	(4) Three
PG-EE-	-June,	2023/(Comp	uter Science Grou	p)(SET-	X)/(C)	

4. Statements: All Carrots are birds. Some telephones are Carrots. All bedsheets are

telephone.

P. T. O

9.	If the digits in the number 25673948 are arranged in ascending order from left to right, what will be the sum of the digits which are fourth from the right and third from the left in the new arrangement?						
	(1) 10	(2) 9	(3) 8	(4) 6			
0.	There are 6 person	ons A, B, C, D, E a	nd F who have diffe	erent rank in class test	exam.		
	than C, but he d situated between	Person A got last rank in class. E was not first in class test rank. B got more marks than C, but he did not get second rank in class. E got more marks than only A. F was situated between D and B in class test ranking, and B score less than D. The second highest person got 92 marks.					
	D got which of t	D got which of the following possible marks?					
	(1) 89	(2) 92	(3) 93	(4) 88			
1.	Answer the questions on the basis of the information given below:						
	leave the lunched most valuable p C and D are bitt	n. The players we can early and so re player's trophy are rivals and there	ill be seated on the nust be seated at th ad so much be in th	and G are to be how e dais in a row. A and e extreme right. B will be centre to facilitate p ed as far apart as poss ther?	d G have to Il receive the presentation		
	(1) B and D		(2) C and 1	F			
	(3) D and G		(4) E and 2	A			

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(C)

8. If the day before yesterday was Saturday, what day will fall on the day after

(2) Thursday

(4) Tuesday

C

tomorrow?

(1) Friday

(3) Wednesday

12. Read the text and the statements carefully, and answer the questions .

Four people of different nationalities live on the same side of a street in four houses each of different colors. Each person has a different favorite drink. The following additional information is also known:

- A. The Englishman lives in the red house.
- B. The Italian drink tea.
- C. The Norwegian lives in the first house on the left.
- D. In the second house from the right they drink milk.
- E. The Norwegian lives adjacent to the blue house.
- F. The Spaniard drinks fruit juice.
- G. Tea is drunk in the blue house.
- H. The white house is to the right of the red house.

The Norwegian drinks:

- (1) Milk
- (2) Cocoa
- (3) Tea
- (4) Fruit Juice

13. Answer the questions on the basis of the information given below:

A, B, C, D, E and F are a group of friends. There are two house wives, one professor, one engineer, one accountant and one lawyer in the group. There are only two married couples in the group. The lawyer is married to D, who is a housewife. No women in the group are either an engineer or an accountant. C, the accountant, is married to F, who is a professor. A is married to housewife. E is not a housewife.

How many members of group are males?

- (1) 1
- (2) 3
- (3) 4
- (4) Cannot be determined

14. The first and the last parts of the sentence are numbered 1 & 6. The rest of the sentence, is split into four parts and named P, Q, R and S. These four parts are not given in their proper order.

Read the sentence and find out which of the four combinations is correct?

- 1. It was obvious
- P. made by him
- Q. submitted at the meeting
- R. from the comments
- S. on the draft proposals
- 6. that he was not satisfied with them.
- (1) QRSP

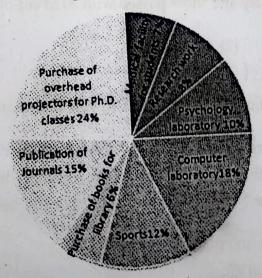
(2) SQRP

(3) RPSQ

(4) PSRQ

- **15.** In an examination the average marks of Rohit are 63. If he got 20 more marks in Science and 28 more marks in Mathematics, then his average would have been 69. Find the total number of subjects he studied:
  - (1) 7
- (2) 8
- (3) 10
- (4) 12
- **16.** Study the following pie-chart carefully to answer these questions:

#### **Total Expenditure: Rs. 60 Lacs**



### Expenditure of funds by University for various purpose

What is the difference between the expenditure made by university for Publication of Journals and Psychology Laboratory?

- (1) Rs. 4 lacs
- (2) Rs. 3 lacs
- (3) Rs. 4.2 lacs
- (4) Rs. 3.8 lacs

### 17. Study the following table and answer the questions:

Classification of 100 students based on the marks obtained by them in Physics and Chemistry in an Examination:

Subjects	Marks out of 50					
	40 and above	30 and above	20 and above	10 and above	0 and above	
Physics	9	32	80	92	100	
Chemistry	4	21	66	81	100	
Average (Aggregate)	7	27.	73	87	100	

What is the difference between the number of students passed with 30 as cut-off marks in Chemistry and those passed with 30 as cut-off marks in aggregate?

(1) 3

(2) 4

(3) 5

(4) 6

#### 18. Answer the questions based on the following information:

A, B, C and D are to be seated in a row. But C and D cannot be together. Also B cannot be at the third place. If A and B are together, then which of the following must be necessarily *true*?

- (1) C is not at the first place
- (2) A is at the third place
- (3) D is at the first place
- (4) C is at the first place

19. Answer the questions on the basis of the following information:

Four families decided to attend the marriage ceremony of one of their colleagues. One family has no kids, while the others have at least one kid each. Each family with kids has at least one kid attending the marriage.

Given below some information about the families, and who reached when to attend the marriage:

The family with 2 kids came just before the family with no kids.

Shanti who does not have any kids reached just before Sridevi's family. Sunil and his wife reached last with their only kid.

Anil is not the husband of Joya.

Anil and Raj are fathers.

Sridevi's and Anita's daughters go to the same school.

Joya came before Shanti and met Anita when she reached the venue. Raman stays the farthest from the venue.

Raj said his son could not come because of his exams.

Name the correct pair of husband and wife:

- (1) Raj and Shanti
- (2) Sunil and Sridevi
- (3) Anil and Sridevi
- (4) Raj and Anita

### **20.** Answer the questions on the basis of the information given below:

The seven basic symbols in a certain numeral system and their respective values are as follows:

$$I = 1$$
,  $V = 5$ ,  $X = 10$ ,  $L = 50$ ,  $C = 100$ ,  $D = 500$  and  $M = 1000$ 

In general, the symbols in the numeral system are read from left to right, starting with the symbol representing the largest value; the same symbol cannot occur continuously more than three times; the value of the numeral is the sum of the values of the symbols. For example, XXVII = 10 + 10 + 5 + 1 + 1 = 27. An exception to the left to right reading occurs when a symbol is followed immediately by a symbol of greater value; then, the smaller value is subtracted from the larger.

For example, XLVI = (50 - 10) + 5 + 1 = 46.

The value of the numeral MCMXCIX is:

- (1) 1999
- (2) 1899
- (3) 1989
- (4) 1889

(1) 6

**21.** If  $p \times q = p + q + \frac{p}{q}$ , what is the value of  $8 \times 2$ ?

(2) 10

(4) 16

2	<b>22.</b> If $0.13 \times p^2 = 13$ ,	then $p$ is equal to:		
	(1) 10	(2) 0.01	(3) 0.001	(4) 100
2	3. If $A = \{5, 6\}$ and $B$	$B = \{7, 8\}$ , then what is	the number of relatio	ns from $A$ to $B$ ?
	(1) $2^2$	(2) $2^3$	(3) 24	(4) 2 <sup>5</sup>
24	4. If $A = \{1, 2, 3, 4, 5, A \cap B \}$ ?	$5, 7, 8, 9$ and $B = \{2, 4, 4, 6, 7, 8, 9\}$	, 6, 7, 9}, then find nu	umber of proper subsets of
	(1) 14	(2) 15	(3) 32	(4) 33
25	. The magnitude of	f the vector $6i + 2j + 3k$	k:	
	(1) 5	(2) 6	(3) 7	(4) 8
26	$(\sin 30^{\circ} + \cos 30^{\circ})$	$-(\sin 60^{\circ} + \cos 60^{\circ})$ :		Same and the same
	(1) 0		(3) 2	(4) -1
27.	If $x = 7 - 4\sqrt{3}$ , the	en what is the value o	$f\sqrt{x} + \frac{1}{\sqrt{x}}?$	
	(1) 1	(2) 2	(3) 3	(4) 4
28.	The scalar produc	t of $5i + j - 3k$ and $3i -$	-4j + 7k is:	
	(1) 15	(2) -15	(3) 10	(4) -10
29.		ation of a ladder lea ay from the wall. The		is 60° and the foot of the:
	(1) 2.3 m	(2) 4.6 m	(3) 7.8 m	(4) 9.2 m
30.	An urn contains of picked up at rand yellow?	ored, 4 blue, 2 gree om, what is the pro	en and 3 yellow m bability that either	arbles. If two marbles are both are green or both are
	(1) 5/91		(2) 1/3	
	(3) 4/105	of the second	(4) None of the a	bove
PG-EE-	-June, 2023/(Compu	iter Science Group)(	(SET-X)/(C)	
			STARTED BY THE START OF THE STA	

(3) 14

31.	Fill in the blank:					
	The river Thames flows London.					
	(1) through (2) on (3) over (4) in					
32.	In the following choose the one which best express the meaning of the idiom/phrase:					
	Talk through one's hat					
	(1) To talk secretly (2) Talk positively					
	(3) Talk good points (4) Talk nonsense					
33.	Choose the word which best expresses the meaning of the given word: VENT					
	(1) End (2) Storage					
	(3) Opening (4) Past tense of Go					
34.	My father's dealings are open and above board.					
	(1) Mandatory (2) Without any secret					
	(3) Very clear (4) To everyone's liking					
35.	Choose the word which best expresses the meaning of the given word:					
	COMBAT					
	(1) Conflict (2) Quarrel (3) Feud (4) Fight					
36.	Read the passage and choose most relevant answer:					
	Erosion of America's farmland by wind and water has been a problem since settle first put the prairies and grasslands under the plow in the nineteenth century. By 1930s, more than 282 million acres of farmland were damaged by erosion. After years of conservation efforts, soil erosion has accelerated due to new demands platon the land by heavy crop production. In the years ahead, soil erosion and pollution problems it causes are likely to replace petroleum scarcity as the nationst critical natural resource problem.	the 40 ced the				
	As we understand from the reading, today, soil erosion in America					
	(1) is worse than it was in the nineteenth century					
	(2) is the most critical problem that the nation faces					
	(3) causes humans to place new demands on the land					
	(4) is worse in areas which have a lot of petroleum production					

0	
37	7. In the following question, a sentence has been broken into parts and the parts have been scrambled and numbered. Choose the <i>correct</i> order of these parts from the given alternatives.
	I. In a masterly way
	II. Munshi Premchands works, especially fiction
	III. Have been analysed and critiqued
	IV. In the next chapter
	(1) II III I IV (2) III II I IV (3) IV II III I (4) I II III IV
38.	Fill in the blank with the most appropriate word from the options given below:
	A good driver will be very careful before carrying out a complex
	(1) Movement (2) Manoeuvre (3) Motion (4) Movement
19.	S1: A noise started above their heads.  P: But people did not take it seriously.  Q: It was to show everyone that there was something wrong.  R: It was a dangerous thing to do.  S: For, within minutes the ship began to sink.  S6: Nearly 200 lives were lost on the fateful day.  The proper sequence should be:  (1) PQSR (2) PRQS (3) QPRS (4) QPSR
0.	S1: She said on the phone that she would report for duty next day.
	P: We waited for few days then we decided to go to her place.
	Q: But she did not.
	R: We found it locked.
	S: Even after that we waited for her quite a few days.
	S6: Eventually we reported to the Police.
	The proper sequence should be:
	(1) PRSQ (2) QPSR (3) QPRS (4) SQPR

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(C)

41.	. What is the full form of WORM?		was rolls busin si
	(1) Write Once, Read More		
	(2) Write Over, Read Mode		
	(3) Write Once, Read Many		
	(4) Write Out, Read Many		
42.	. What of the following is octal representa	tion (in 4 digits) of	decimal number (806) 2
	(1) 3567 (2) 1600	(3) 1701	(4) 1654
43.	. MSD refers to ?		Park Director (1)
	(1) Many Significant Digit		
	(2) Most Significant Decimal		
	(3) Multiple Significant Digit		
	(4) Most Significant Digit		The Water Committee William
44.	2's complement of -14?		
	(1) 11110001 (2) 10010010	(3) 11100001	(4) 01010110
<b>45</b> .	Which of the following is invalid hexade	ecimal?	r Tynun wett ba
	(1) 0A23 (2) AB14	(3) XA23	(4) 1234
16.	Which of the following is false?	Alta a batan	oz. How Hall 72 a c
	(1) 2's complement of a 2's complement	of a number I the n	umber itself.
	(2) Excess-3 code for 369 is 01111001110	0	
	(3) 1-bit gray code has two code words	0 and 1	
	(4) In 7-bit hamming code of BCD, locations.	the parity bits an	re placed at 1, 2 and

47. What is bootstrapping called?

(1) Hot Boot

	(3) Cold hot strap	(4) Hot bootst	Тар	
48.	Which of the following is system soft	ware?		
	(1) Operating System	(2) Utilities		
	(3) Compiler	(4) All of the a	bove	
49.	Which of the following payment card	d has a microchip e	mbedded in its surface	ce :
	(1) Debit Card	(2) Credit Car	d	
	(3) Metro Card	(4) Charge Ca	rd	
50.	Which of the following is a condition	that causes deadl	ock?	
	(1) Circular Wait	(2) Mutual Ex	clusion	
	(3) Hold and Wait	(4) All of the	above	
51.	Aman is 16th from the left end in a read Gagan is 11th from Aman towards end. How many boys are there in the	the right and 3rd	ivek is 18th from the from Vivek towards	right end. s the right
	(1) 40 (2) 48	(3) 42	(4) 41	
52.	How many 7's are there in the follow by 3 but immediately preceded by 8		are not immediately	y followed
	8987622632697328727787	737794		
	(1) 10 (2) 3	(3) 2	(4) 0	
53.	Manisha ranked sixteenth from the those who passed an examination. So five failed in it. How many boys were	ix boys did not pa	rticipate in the comp	tom amon
	(1) 40 (2) 48	(3) 55	(4) 58	

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(C)

(2) Cold Boot

54.	In a list, the rank of Mahesh was 16 from the top and whereas from bottom, the rank
	is 29. The list was about the passed-out students. Six students were failed due to non-
	participation and 5 were failed. Find the total number of students present in the class

- (1) 55
- (2) 54
- (3) 53
- (4) 52

**55.** If 
$$\times$$
 means  $\div$ , – means  $\times$ ,  $\div$  means + and + means –, then  $(3 - 15 + 19) \times 8 + 6 = ?$ 

- (1) 2
- (2) -1
- (3) 4
- (4) 8
- **56.** A sum of Rs.1 890 has to be used to give 9 prizes to the customers of a super market for their overall academic purchases. If each prize is Rs. 30 less than its preceding price, what is the least value of the price?
  - (1) 80
- (2) 85
- (3) 90
- (4) 95
- **57.** If "A" denotes "subtracted from", "B" denotes "added to", "C" denotes "divided by", "D" denotes "multiplied by", then which of the following statement is **correct**?
  - (1) 13C13A13B13D13 = 157
  - (2) 18C16D49A27B9 = 200
  - (3) 3A12B16D17Cl = 163
  - (4) 5C7A9D8B2 = 294
- **58.** *Statement*: Should children be legally made responsible to take care of their parents during their old age?

#### Arguments:

- I. Yes. Such matter can only be solved by legal means.
- II. Yes. Only this will bring some relief to poor parents.
- (1) Only Argument I is strong
- (2) Only Argument II is strong
- (3) Either I or II is strong
- (4) Neither I nor II is strong

#### Arguments:

- I. Yes. Fashions keep changing and hence consumption of cloth increases.
- II. No. Fashionable clothes are a person's self-expression and therefore his/her fundamental right.
- (1) Only Argument I is strong
- (2) Only Argument II is strong
- (3) Either I or II is strong
- (4) Neither I nor II is strong
- **60. Statement**: Should 'computer knowledge' be made a compulsory subject for all the students at secondary school level?

#### Arguments:

- I. No, our need is 'bread' for everyone, we cannot follow western models.
- II. Yes. We cannot compete in the international market without equipping our children with computers.
- (1) Only Argument I is strong
- (2) Only Argument II is strong
- (3) Either I or II is strong
- (4) Neither I nor II is strong
- 61. A user can get files from another computer on the Internet by using:
  - (1) TELNET
- (2) HTTP
- (3) FTP
- (4) UTP
- 62. Transport layer is at which level in TCP/ IP model?
  - (1) 1
- (2) 2
- (3) 3
- (4) 4
- **63.** Which tag is used for displaying large font size?
  - (1) <BIG></BIG>

(2) <LARGE></LARGE>

(3) <SIZE></SIZE>

(4) <FONT></FONT>

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(C)

64.	Which among the following language is better for structured coding?
	(1) BASIC (2) PASCAL (3) FORTAN (4) PL/1
65.	What type of scheduling is round-robin scheduling?
	(1) Linear Data Scheduling
	(2) Preemptive Scheduling
	(3) Non-linear data scheduling
	(4) Non-Preemptive Scheduling
66.	
	(1) Multiprogramming (2) Multithreading
	(3) Multitasking (4) None of the above
67.	Which html tag is used to scroll text in a Web Page?
	(1) <scroll></scroll>
	(2) <round></round>
	(3) <marquee></marquee>
	(4) <go></go>
68.	is single sequential flow of control in a program.
	(1) Process (2) Task (3) Thread (4) Structure
69.	Which among the following is the property of Unix OS?
	(1) Multi-user (2) Time Sharing
	(3) Multi-tasking (4) All of the above
70	Which of the following is <i>not</i> a paired tag?
70.	(1) <img/> (2) <u> (3) <b> (4)</b></u>

		1
71.	Which among the following OS does no	
	(1) Windows NT	(2) Windows 98
	(3) Windows XP	(4) MS DOS
72.	In computers, subtraction is carried out	by:
	(1) 1's complement	(2) 9's complement
	(3) 2's complement	(4) 10's complement
73.	Which of the following is <i>not</i> the weig	hted code ?
	(1) Decimal number system	(2) Excess-3 code
	(3) Binary number system	(4) None of the above
74.	Cache memory acts between:	Martinogramman
	(1) RAM and ROM	(2) CPU and RAM
	(3) CPU and Hard Disk	(4) None
75.	- 101111 – 010101 = ?	efforza
	(1) 100100 (2) 011010	(3) 011001 (4) 110011
76.	Keyboard shortcut for redo:	
	(1) Ctrl +Z (2) Ctrl+ Y	(3) $Ctrl + X$ (4) $Shift + Y$
77.	1101 + 1100 in binary arithmetic?	inger i Northalling an Ignis a
	(1) 11001 (2) 1100	(3) 1001 (4) 0011
78.	The address technique employed by	a CPU is:
	(1) Direct	(2) Indirect
	(3) Immediate	(4) All of the above
79	. Keys to switch between applications	s running in Windows OS :
	(1) Ctrl + Tab	(2) Alt + Tab
	(3) Shift + Tab	(4) Fn + Tab

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(C)

						1
80.	$(10.10) \times (01.01)$	stion ( a thin		ig sitt mon ustr	Line seem a trooker . 10	
	(1) 011.0010		(2)	110.0011		
	(3) 001.1101		(4)	None of the abo	ove	
81.	Choose missing pat	ttern:				
	QPO, NML, KJI, -,	EDC ·				
	(1) HGF	(2) CAB	(3)	JKM	(4) GHD	
82.	Choose the correct	relation similar to fo	ollow	ing:		
	FISH: SCHOOL			And the segre		
	(1) Herd : Peacock	-C- A.	(2)	Wolf : Pack	****	
	(3) Cow: Farm	0.0	Spr			
00				Elephant: Jung		
83.	Find the minimum	number of straight	lines	required to mak	e the given figure :	
			1	1	Annaer France	
		HATAT		今		
	(1) 15	(2) 21	(2)	10	(4) 00	
0.4	and the state of t			18	(4) 20	
84.	Find the minimum	number of straight	lines	in the below fig	ure:	
	and the same of		X	VX		
	(1) 20	(2) 19	(3)	17	(4) 15	
					(4) 15	
85.	Vineet is taller that taller than Sumit b	an Raman but short ut shorter than Ram	ter th	an Jyoti. Sumit Vho is the tallest	is the shortest. Deepa?	k i
	(1) Jyoti		(2)	Raman		
			700			

86. Select the missing letter from the given options:

OCICO I		
В	J	IUD
Е	K	В
G	U	?

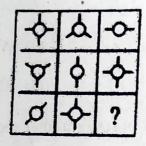
(1) O

(2) M

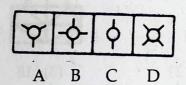
(3) K

(4) P

**87.** Select the Answer figure that fits in the blank space in the given Problem figure : **Problem Figure** 



Answer Figures:



(1) D

(2) C

(3) B

(4) A

**88.** Select the option that depicts the correct mirror image of the given word when the mirror is placed horizontally below the word :

HEALTHY

1. HEALTHY

2. YHTLA3H

HEALTHY .E

4. YHTLAEH

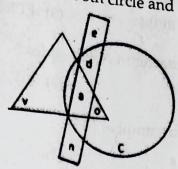
(1) 1

(2) 2

(3) 3

(4) 4

Which of the following part is a part of both circle and triangle?



(1) e

(2) v

(3) o

(4) c

The proportion of male students and the proportion of vegetarian students in a school 90. are given below. The school has a total of 800 students, 80% of whom are in the secondary section and rest equally divided between class 11 and 12:

What is the percentage of vegetarian student in class 11?

	contradent in class 11 ?		
	Male (M)	Vegetarian (V)	
Class 12	0.60	0.54	
Class 11	0.55	0.50	
Secondary Section	0.275 (288)	0.55(352)	
Total	0.475	0.53	

(1) 40

(2) 45

(3) 60

(4) 65

91. Which of the following is the computer system's hardware component?

(1) **RAM** 

(2) Keyboard

(3) Adobe Reader

(4) ROM

How many bits are there in 1 nibble?

(1) 4

(2) 8

(3) 16

(4) 24

93. What is the full form of USB?

(1) Universal Sequential Bus

(2) Unique Serial Bus

(3) Universal Serial Bus

(4) Unique Sequential Bus

9	4. What one of th	e following is volat	tile memory?	DROM.
	(1) RAM	(2) ROM	(3) EPROM	(4) PROM
95	5. What is the len	gth of character in	ASCII codes?	
	(1) 4	(2) 8	(3) 7	(4) 6
96	. What is the val	ue of binary numbe	er 011 ?	
	(1) 2	(2) 4	(3) 3	(4) 7
97	. Which of the fo	llowing is true?		
		s equal to 1024 kild	obyte	
	(2) Decimal nu	mber system canno	ot contain binary digits	
	(3) Hexadecima	al system have 16 h	oits	
	(4) None	· · · · · · · · · · · · · · · · · · ·	Cast Handate of Cast	
98.	What is the octa	l representation of	(011101) ?	
	(1) 35	(2) 45	(3) 34	(4) 54
99.	Which is the larg	gest unit of storage	?	non-x rus
	(1) Kb	(2) Mb	(3) Zb	(4) Yb
00.	How many value	es can be represen	ted by one byte?	
	(1) 512	(2) 64	(3) 256	(4) 8

Total No. of Printed Pages: 21

# (DO NOT OPEN THIS QUESTION BOOKLET BEFORE TIME OR UNTIL YOU ARE ASKED TO DO SO)

# D

## PG-EE-June, 2023

SET-X

10552

**SUBJECT: Computer Science Group** 

		Sr. No
Time: 1¼ Hours Roll No. (in figures)	Max. Marks : 100 (in words)	Total Questions : 100
Name	Date of Birth	
Father's Name	Mother's Name	
Date of Examination		
(Signature of the Candidate)		(Signature of the Invigilator)

## CANDIDATES MUST READ THE FOLLOWING INFORMATION/INSTRUCTIONS BEFORE STARTING THE QUESTION PAPER.

- 1. All questions are compulsory.
- 2. The candidates *must return* the question booklet as well as OMR Answer-Sheet to the Invigilate concerned before leaving the Examination Hall, failing which a case of use of unfairmeans / mis-behaviour will be registered against him / her, in addition to lodging of an FIR with the police. Further the answer-sheet of such a candidate will not be evaluated.
- 3. Keeping in view the transparency of the examination system, carbonless OMR Sheet is provided to the candidate so that a copy of OMR Sheet may be kept by the candidate.
- 4. Question Booklet along with answer key of all the A, B, C & D code shall be got uploaded on the University Website immediately after the conduct of Entrance Examination. Candidates may raise valid objection/complaint if any, with regard to discrepancy in the question booklet/answer key within 24 hours of uploading the same on the University Website. The complaint be sent by the students to the Controller of Examinations by hand or through email. Thereafter, no complaint in any case, will be considered.
- 5. The candidate *must not* do any rough work or writing in the OMR Answer-Sheet. Rough work, if any, may be done in the question booklet itself. Answers *must not* be ticked in the question booklet.
- 6. There will be no negative marking. Each correct answer will be awarded one full mark. Cutting, erasing, overwriting and more than one answer in OMR Answer-Sheet will be treated as incorrect answer.
- 7. Use only Black or Blue Ball Point Pen of good quality in the OMR Answer-Sheet.
- 8. Before answering the questions, the candidates should ensure that they have been supplied correct and complete booklet. Complaints, if any, regarding misprinting etc. will not be entertained 30 minutes after starting of the examination.

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(D)

1. Choose missing pattern:

QPO, NML, KJI, -, EDC

- (1) HGF
- (2) CAB
- (3) JKM
- (4) GHD

**2.** Choose the *correct* relation similar to following:

FISH: SCHOOL

(1) Herd: Peacock

(2) Wolf: Pack

(3) Cow: Farm

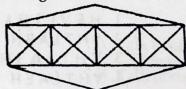
(4) Elephant: Jungle

3. Find the minimum number of straight lines required to make the given figure:



- (1) 15
- (2) 21
- (3) 18
- (4) 20

4. Find the minimum number of straight lines in the below figure:



- $(1) \cdot 20$
- (2) 19
- (3) 17
- (4) 15

**5.** Vineet is taller than Raman but shorter than Jyoti. Sumit is the shortest. Deepak is taller than Sumit but shorter than Raman. Who is the tallest?

- (1) Jyoti
- (2) Raman
- (3) Vineet
- (4) Deepak

6. Select the missing letter from the given options:

В	J	I
E	K	В
G	U	. ?

(1) O

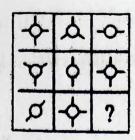
- (2) M
- (3) K

(4) P

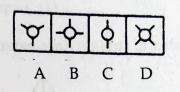
PG-EE-June, 2023/(Computer Science Group)(SET-X)/(D)

P. T. O.

7. Select the Answer figure that fits in the blank space in the given Problem figure : Problem Figure



Answer Figures:

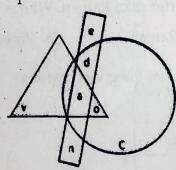


- (1) D
- (2) C
- (3) B
- (4) A
- **8.** Select the option that depicts the correct mirror image of the given word when the mirror is placed horizontally below the word:

HEALTHY

- 1. HEALTHY
- 2. YHTLA3H
- HEALTHY .E
- 4. YHTLAEH

- (1) 1
- (2) 2
- (3) 3
- (4) 4
- 9. Which of the following part is a part of both circle and triangle?



(1) e

(2) v

(3) o

(4) c

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(D)

10. The proportion of male students and the proportion of vegetarian students in a school are given below. The school has a total of 800 students, 80% of whom are in the secondary section and rest equally divided between class 11 and 12:

What is the percentage of vegetarian student in class 11?

	Male (M)	Vegetarian (V)
Class 12	0.60	0.54
Class 11	0.55	0.50
Secondary Section	0.275 (288)	0.55(352)
Total	0.475	0.53

111	10
(1)	40

(2)	45
(/)	45
\ <del></del> /	10

(4) 65

1	1.	Fill	in	the	bl	lan	k	
					-			

The river Thames flows ...... London.

- (1) through
- (2) on
- (3) over
- (4) in

12. In the following choose the one which best express the meaning of the idiom/phrase:

Talk through one's hat

(1) To talk secretly

(2) Talk positively

(3) Talk good points

(4) Talk nonsense

13. Choose the word which best expresses the meaning of the given word:

**VENT** 

(1) End

(2) Storage

(3) Opening

- (4) Past tense of Go
- 14. My father's dealings are open and above board.
  - (1) Mandatory

(2) Without any secret

(3) Very clear

(4) To everyone's liking

15. Choose the word which best expresses the meaning of the given word:

**COMBAT** 

- (1) Conflict
- (2) Quarrel
- (3) Feud
- (4) Fight

16. Read the passage and choose most relevant answer:

Erosion of America's farmland by wind and water has been a problem since settlers first put the prairies and grasslands under the plow in the nineteenth century. By the 1930s, more than 282 million acres of farmland were damaged by erosion. After 40 years of conservation efforts, soil erosion has accelerated due to new demands placed on the land by heavy crop production. In the years ahead, soil erosion and the pollution problems it causes are likely to replace petroleum scarcity as the nation's most critical natural resource problem.

As we understand from the reading, today, soil erosion in America .....

- (1) is worse than it was in the nineteenth century
- (2) is the most critical problem that the nation faces
- (3) causes humans to place new demands on the land
- (4) is worse in areas which have a lot of petroleum production
- 17. In the following question, a sentence has been broken into parts and the parts have been scrambled and numbered. Choose the correct order of these parts from the given alternatives.
  - I. In a masterly way
  - II. Munshi Premchands works, especially fiction
  - III. Have been analysed and critiqued
  - IV. In the next chapter
  - (1) II III I IV

(2) III II I IV

(3) IV II III I

- (4) I II III IV
- 18. Fill in the blank with the most appropriate word from the options given below:

A good driver will be very careful before carrying out a complex ......

(1) Movement

(2) Manoeuvre

(3) Motion

(4) Movement

19.	S1: A noise started above their heads.				
	P: But people did not take it seriously.				
	Q: It was to show everyone that there was something wrong.				
	R: It was a dangero	ous thing to do.			
	sink.				
	S6: Nearly 200 live	s were lost on the fat	eful day.		
	The proper sequence	ce should be :	scheolalmy Explyenced (in		
	(1) PQSR	(2) PRQS	(3) QPRS	(4) QPSR	
20.	S1: She said on the	phone that she wou	ld report for duty no	ext day.	
	P: We waited for few days then we decided to go to her place.				
	Q: But she did not.	antes ante (A. Q	grin	margorq	
	R : We found it locked.				
	S: Even after that we waited for her quite a few days.				
	S6: Eventually we reported to the Police.				
	The proper sequence	ce should be:	(3) all	und>	
	(1) PRSQ	(2) QPSR	(3) QPRS	(4) SQPR	
21.	A user can get files from another computer on the Internet by using:				
	(1) TELNET	(2) HTTP	(3) FTP	(4) UTP	
		A STAN AND A STAN AS	no to won languips	is elogie si	
22.	2. Transport layer is at which level in TCP/ IP model?				
	(1) 1	(2) 2	(3) 3	(4) 4	
23.	Which tag is used for displaying large font size?				
	(1) <big></big>	and on half to the			
	(O) LARGE /LARGE				
	(3) <size></size>				
	(4) <font><th>NI&gt;</th><th></th><th></th></font>	NI>			

2	4. Which among the following lang	uage is better for structured coding?				
	(1) BASIC (2) PASCAL					
25	. What type of scheduling is round	-robin scheduling ?				
	(1) Linear Data Scheduling	The state of the s				
	(2) Preemptive Scheduling					
	(3) Non-linear data scheduling					
	(4) Non-Preemptive Scheduling	PORT - CORD OF THEOREM				
26.	ability to switch from one task to	program to be ready for execution and provides the another.				
	(1) Multiprogramming	(2) Multithreading				
	(3) Multitasking	(4) None of the above				
27.	27. Which html tag is used to scroll text in a Web Page?					
	(1) <scroll></scroll>					
	(2) <round></round>					
	(3) <marquee></marquee>					
	(4) <go></go>					
28.	is single sequential flow	of control in a program.				
	(1) Process (2) Task	(3) Thread (4) Structure				
29.	Which among the following is the property of Unix OS?					
	(1) Multi-user	(2) Time Sharing				
	(3) Multi-tasking	(4) All of the above				
30.	Which of the following is <i>not</i> a pai	red tag?				
	(1) <img/> (2) <u></u>	(3) <b> (4)</b>				

31	. Which of the follo	owing is the compu	iter system's hardward	e component ?	
	(1) RAM		(2) Keyboard		
	(3) Adobe Reade	r	(4) ROM		
32	How many bits ar	e there in 1 nibble	?		
	(1) 4	(2) 8	(3) 16	(4) 24	
33.	What is the full fo	rm of USB?	. I des habes es		
	(1) Universal Seq	uential Bus	(2) Unique Seria	1 Bus	
	(3) Universal Seri	al Bus	(4) Unique Sequ		
34.	What one of the fo	ollowing is volatile			
	(1) RAM	(2) ROM	(3) EPROM	(4) PROM	
25			desired and all the second	(1) TROW	
<b>35.</b>	What is the length				
	(1) 4	(2) 8	(3) 7	(4) 6	
36.	What is the value	of binary number	011 ?		
	(1) 2	(2) 4	(3) 3	(4) 7	
37.	Which of the follow	wing is true?	an aminant and the		
	(1) 1 gigabyte is equal to 1024 kilobyte				
	(2) Decimal number system cannot contain binary digits				
	(3) Hexadecimal s	ystem have 16 bits		Apple of the second	
	(4) None		e - means & and - p		
38.	What is the octal re	epresentation of (0			
	(1) 35	(2) 45	(3) 34	(4) 54	
9. Which is the largest unit of storage?					
	(1) Kb	(2) Mb	(3) Zb	(4) Yb	
			1 hay one byte ?		
10.	How many values			(4) 8	
	(1) 512	(2) 64	(3) 256	(1)	

P

(1) 40

42.	How many 7's are there in the following series which are not immediately followed by 3 but immediately preceded by 8?						
	8987622632	697328727787	37794	eligno leconici. 193 proposi la proposit. 193			
	(1) 10	(2) 3	(3) 2	(4) 0			
43.	those who passed		boys did not partici	th from the bottom among ipate in the competition and			
	(1) 40	(2) 48	(3) 55	(4) 58			
44.	is 29. The list was	In a list, the rank of Mahesh was 16 from the top and whereas from bottom, the rank is 29. The list was about the passed-out students. Six students were failed due to non participation and 5 were failed. Find the total number of students present in the class.					
	(1) 55	(2) 54	(3) 53	(4) 52			
45.	If $\times$ means $\div$ , – means $\times$ , $\div$ means + and + means –, then $(3 - 15 \div 19) \times 8 + 6 = ?$						
	(1) 2	(2) -1	(3) 4	(4) 8			
46.	for their overall	0 has to be used to academic purchase least value of the process.	s. If each prize is F	customers of a super market Rs. 30 less than its preceding (4) 95			
CEE	Tumo 2002//C			(-)			
O-CC	- juile, 2023/(Comr	uter Science Crow	WICET VIII				

41. Aman is 16th from the left end in a row of boys and Vivek is 18th from the right end.

end. How many boys are there in the row?

(2) 48

Gagan is 11th from Aman towards the right and 3rd from Vivek towards the right

(3) 42

(4) 41

- **47.** If "A" denotes "subtracted from", "B" denotes "added to", "C" denotes "divided by", "D" denotes "multiplied by", then which of the following statement is *correct*?
  - (1) 13C13A13B13D13 = 157
  - (2) 18C16D49A27B9 = 200
  - (3) 3A12B16D17C1 = 163
  - (4) 5C7A9D8B2 = 294
- **48.** Statement: Should children be legally made responsible to take care of their parents during their old age?

### Arguments:

D

- I. Yes. Such matter can only be solved by legal means.
- II. Yes. Only this will bring some relief to poor parents.
- (1) Only Argument I is strong
- (2) Only Argument II is strong
- (3) Either I or II is strong
- (4) Neither I nor II is strong
- 49. Statement: Should fashionable dresses be banned?

## Arguments:

- I. Yes. Fashions keep changing and hence consumption of cloth increases.
- II. No. Fashionable clothes are a person's self-expression and therefore his/her fundamental right.
- (1) Only Argument I is strong
- (2) Only Argument II is strong
- (3) Either I or II is strong
- (4) Neither I nor II is strong

**50. Statement**: Should 'computer knowledge' be made a compulsory subject for all the students at secondary school level?

#### Arguments:

- I. No, our need is 'bread' for everyone, we cannot follow western models.
- II. Yes. We cannot compete in the international market without equipping our children with computers.
- (1) Only Argument I is strong
- (2) Only Argument II is strong
- (3) Either I or II is strong
- (4) Neither I nor II is strong
- 51. Answer the questions on the basis of the information given below:

Seven varsity basketball players A, B, C, D, E, F and G are to be honoured at a special luncheon. The players will be seated on the dais in a row. A and G have to leave the luncheon early and so must be seated at the extreme right. B will receive the most valuable player's trophy and so much be in the centre to facilitate presentation. C and D are bitter rivals and therefore, must be seated as far apart as possible.

Which of the following pairs cannot be seated together?

- (1) B and D
- (2) C and F
- (3) D and G
- (4) E and A
- 52. Read the text and the statements carefully, and answer the questions .

Four people of different nationalities live on the same side of a street in four houses each of different colors. Each person has a different favorite drink. The following additional information is also known:

- A. The Englishman lives in the red house.
- B. The Italian drink tea.
- C. The Norwegian lives in the first house on the left.
- D. In the second house from the right they drink milk.
- E. The Norwegian lives adjacent to the blue house.
- F. The Spaniard drinks fruit juice.
- G. Tea is drunk in the blue house.
- H. The white house is to the right of the red house.

The Norwegian drinks:

- (1) Milk
- (2) Cocoa
- (3) Tea
- (4) Fruit Juice

Answer the questions on the basis of the information given below: A, B, C, D, E and F are a group of friends. There are two house wives, one professor, one engineer, one accountant and one lawyer in the group. There are only two married couples in the group. The lawyer is married to D, who is a housewife. No women in the group are either an engineer or an accountant. C, the accountant, is married to F, who is a professor. A is married to housewife. E is not a housewife. How many members of group are males? (1) 1

- (2) 3
- (3) 4
- (4) Cannot be determined
- 54. The first and the last parts of the sentence are numbered 1 & 6. The rest of the sentence, is split into four parts and named P, Q, R and S. These four parts are not given in their proper order.

Read the sentence and find out which of the four combinations is correct?

- It was obvious
- P. made by him
- Q. submitted at the meeting
- R. from the comments
- on the draft proposals S.
- that he was not satisfied with them.
- (1) QRSP

(2) SQRP

(3) RPSQ

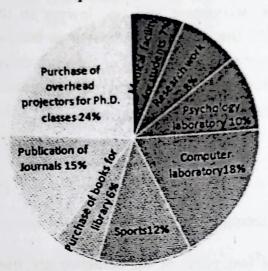
- (4) PSRQ
- 55. In an examination the average marks of Rohit are 63. If he got 20 more marks in Science and 28 more marks in Mathematics, then his average would have been 69. Find the total number of subjects he studied:
  - (1) 7

(2) 8

- (3) 10
- (4) 12

# 56. Study the following pie-chart carefully to answer these questions:

Total Expenditure: Rs. 60 Lacs



## Expenditure of funds by University for various purpose

What is the difference between the expenditure made by university for Publication of Journals and Psychology Laboratory?

- (1) Rs. 4 lacs
- (2) Rs. 3 lacs
- (3) Rs. 4.2 lacs
- (4) Rs. 3.8 lacs

## 57. Study the following table and answer the questions:

Classification of 100 students based on the marks obtained by them in Physics and Chemistry in an Examination:

Subjects			Marks ou	t of 50	100 2
	40 and above	30 and above	20 and above	10 and above	0 and above
Physics	9	32	80	92	100
Chemistry	4	21	66	81	100
Average (Aggregate)	7	27	73	87	100

What is the difference between the number of students passed with 30 as cut-off marks in Chemistry and those passed with 30 as cut-off marks in aggregate?

(1) 3

(2) 4

(3) 5

(4) 6

**58.** Answer the questions based on the following information:

A, B, C and D are to be seated in a row. But C and D cannot be together. Also B cannot be at the third place. If A and B are together, then which of the following must be necessarily *true*?

- (1) C is not at the first place
- (2) A is at the third place
- (3) D is at the first place
- (4) C is at the first place

**59.** Answer the questions on the basis of the following information:

Four families decided to attend the marriage ceremony of one of their colleagues. One family has no kids, while the others have at least one kid each. Each family with kids has at least one kid attending the marriage.

Given below some information about the families, and who reached when to attend the marriage:

The family with 2 kids came just before the family with no kids.

Shanti who does not have any kids reached just before Sridevi's family. Sunil and his wife reached last with their only kid.

Anil is not the husband of Joya.

Anil and Raj are fathers.

Sridevi's and Anita's daughters go to the same school.

Joya came before Shanti and met Anita when she reached the venue. Raman stays the farthest from the venue.

Raj said his son could not come because of his exams.

Name the correct pair of husband and wife:

- (1) Raj and Shanti
- (2) Sunil and Sridevi
- (3) Anil and Sridevi
- (4) Raj and Anita

60. Answer the questions on the basis of the information given below:

The seven basic symbols in a certain numeral system and their respective values are as follows:

$$I = 1$$
,  $V = 5$ ,  $X = 10$ ,  $L = 50$ ,  $C = 100$ ,  $D = 500$  and  $M = 1000$ 

In general, the symbols in the numeral system are read from left to right, starting with the symbol representing the largest value; the same symbol cannot occur continuously more than three times; the value of the numeral is the sum of the values of the symbols. For example, XXVII = 10 + 10 + 5 + 1 + 1 = 27. An exception to the left to right reading occurs when a symbol is followed immediately by a symbol of greater value; then, the smaller value is subtracted from the larger.

For example, XLVI = (50 - 10) + 5 + 1 = 46.

The value of the numeral MCMXCIX is:

- (1) 1999
- (2) 1899
- (3) 1989
- (4) 1889
- 61. On reaching the railway station, you find that the train you wanted to catch is just to start and there is hardly any time for purchasing the ticket. The best thing for you is to:
  - (1) rush to the train rather than miss it and inform the T.T.I. at the next stoppage about your inability to purchase the ticket.
  - (2) rush to the train and perform your journey quietly.
  - (3) first purchase the ticket and then catch the train if it is there.
    - (4) miss the train rather than take the risk of boarding the moving train.
- **62.** Assertion: The problem solving ability, mental performance and memory of the employees of company C are deteriorating.
  - RI. Due to tight schedule at company C, the employees of the company are skipping their breakfast regularly.
  - RII. The job is physical in nature, but not mental.
  - (1) Only RI and not RII is the reason for the assertion.
  - (2) Only RII and not RI is the reason for the assertion.
  - (3) Either RI or RII, but not both, is the reason for the assertion.
  - (4) Neither RI nor RII is the reason for the assertion.

- - Assertion: During polling season, new roads are constructed, there is twenty-four hours of power supply, good supply of water, and many other facilities are provided to the people.
    - RI. Political leaders want to be in the good books of the people.
    - RII. Polling season that is the right time to convert black money to white money in the name of party funds for the industries.
    - (1) Only RI and not RII is the reason for the assertion.
    - (2) Only RII and not RI is the reason for the assertion.
    - (3) Either RI or RII, but not both, is the reason for the assertion.
    - (4) Neither RI nor RII is the reason for the assertion.
- Statements: All Carrots are birds. Some telephones are Carrots. All bedsheets are 64. telephone.

#### Conclusion:

- All bedsheet are birds I.
- II. Some bedsheet are birds
- III. Some birds are telephone
- IV. All telephone are birds
- (1) Only I follows

- (2) Only II follows
- (3) Only I and III follows
- (4) Only III follows
- 65. Statements: Some pearls are gems. All gems are diamonds. No diamond is stone. Some stones are corals.

#### Conclusions:

- Some stones are pearls. I.
- Some corals being diamond is possibility. II.
- III. No stone is pearl.
- (1) Only conclusion I is true
- (2) Both conclusion I and III are true
- (3) Either conclusion I or II is true
- (4) None of the above

16			ank from	the last?
66	Nitin ranks 18th in	a class of 49 student	ts. What is rank from	(4) 19
	(4) 01	(2) 18	(3) 32	
67		ligits are there in the	e number 7346285 w y will be when arra	which are as far away from anged in ascending order
	(1) None	(2) One	(3) Two	(4) Three
68.	If the day before tomorrow?	yesterday was Sat	urday, what day v	vill fall on the day after
	(1) Friday	(2) Thursday	(3) Wednesday	(4) Tuesday
69.	If the digits in the right, what will be from the left in the	the sum of the dig	are arranged in asc its which are fourth	ending order from left to from the right and third
	(1) 10	(2) 9	(3) 8	(4) 6
70.	There are 6 persons	A, B, C, D, E and F	who have different r	ank in class test exam.
	Person A got last re	ank in class. E was	not first in class tes in class. E got more	t rank. B got more marks marks than only A. F was
	situated between D highest person got 9	2 marks.	0,	e less than D. The second
	situated between D highest person got 9 D got which of the f	2 marks.		
	bighest person got 9 D got which of the for	2 marks.		(4) 88
<b>71.</b>	bighest person got 9 D got which of the for	ollowing possible m (2) 92	arks?	Constants of
1.	D got which of the form (1) 89	ollowing possible m (2) 92 n of WORM?	arks?	The state of the s
1.	D got which of the form  (1) 89  What is the full form	ollowing possible m (2) 92 of WORM?	arks?	The state of the s
	highest person got 9 D got which of the form (1) 89 What is the full form (1) Write Once, Rea	ollowing possible m (2) 92 n of WORM? d More d Mode	arks?	The state of the s

PG-EE-June, 2023/(Computer Science Group)(SET-X)/(D)

72,	What of the followi	ng is octal manage		17	
	(1) 3567	(2) 1600	tation (in 4 digits) o	f decimal number (896) ?	
73.	MSD refers to?	(-) 1000	(3) 1701	(4) 1654	
	(1) Many Significa	nt Dioit			
	(2) Most Significar	nt Decimal	er initibativativ	ec. IVI of he hollower	
	(3) Multiple Signif	icant Digit		Gaw China (t)	
	(4) Most Significan	nt Digit			
74.	2's complement of				
	(1) 11110001	(2) 10010010	(3) 11100001	(4) 01010110	
75.	Which of the follow	ving is invalid hexa	decimal?	es monte par ed then	
	(1) 0A23	(2) AB14	(3) XA23	(4) 1234	
76.	Which of the follow	ving is false?		Taking a staking a stake s	
	(1) 2's complemen		ent of a number I th	e number itself	
		for 369 is 01111001		Towns and the second se	
	(3) 1-bit gray code	e has two code wor	ds 0 and 1		
	(4) In 7-bit hamilocations.	ming code of BC	D, the parity bits	s are placed at 1, 2 and	4
77.	What is bootstrapp	oing called?	1000	riisi - PAV ann a Cara ann ann	
	(1) Hot Boot		(2) Cold Boot		
	(3) Cold hot strap		(4) Hot bootst	rap	
78.	Which of the follo	wing is system sof	tware?		
	(1) Operating Sys	tem	(2) Utilities		
	(3) Compiler		(4) All of the	above	

79	9. Which of the follow	ving payment card ha	ıs a ı	microchin embed	ded	in its surface ?
	(1) Debit Card	- Brayment care in		Credit Card	ucu	
	(3) Metro Card			Charge Card		
80	. Which of the follow	ving is a condition that	at ca	uses deadlock?		
	(1) Circular Wait		(2)	Mutual Exclusion	n	
	(3) Hold and Wait		(4)	All of the above		
81	If $p \times q = p + q + \frac{p}{q}$	what is the value of	8 × 2	2?		74, .7s co-opless
	(1) 6	(2) 10	(3)	14	(4)	16
82.	If $0.13 \times p^2 = 13$ , th	en $p$ is equal to:				
	(1) 10	(2) 0.01	(3)	0.001	(4)	100
83.	If $A = \{5, 6\}$ and $B =$	{7, 8}, then what is t	he n	umber of relation	ns fr	om A to B?
	(1) 2 <sup>2</sup>	(2) 2 <sup>3</sup>		A	(4)	
84.	If $A = \{1, 2, 3, 4, 5, 3, A \cap B \}$ ?	7, 8, 9} and $B = \{2, 4, \dots \}$	6, 7,	9}, then find nu	mbe	er of proper subsets of
	(1) 14	(2) 15	(3)	32	(4)	33
85.	The magnitude of ti	he vector $6i + 2j + 3k$	:			
	(1) 5	(2) 6	(3)	7	(4)	8
86.	(sin30° + cos30°) - (	sin 60° + cos 60°):		Salar In		Million Company of
	(1) 0	(2) 1	(3)	2	(4)	-1
87.	If $x = 7 - 4\sqrt{3}$ , then	what is the value of	$\sqrt{x}$	$+\frac{1}{\sqrt{x}}$ ?		erice on the
	(1) 1	(2) 2	(3)	3	(4	) 4
88.	The scalar product of	of $5i + j - 3k$ and $3i -$	4j +	+7k is:		
	(1) 15	(2) -15		10	(4	4) -10
PG-EE-	June, 2023/(Comput	er Science Group)(	SET	-X)/(D)		

89.	The angle of elev ladder is 4.6 m aw (1) 2.3 m	is 60° and the foot of th	ė			
	(1) 2.3 m	(2) 4.6 m	ic icitg	7.8 m	(4) 9.2 m	
90.	An urn contains picked up at rand yellow?	6 red, 4 blue, 2 gr lom, what is the pr		d to storage	harbles. If two marbles as both are green or both a	re re
	(1) 5/91			1/3		
	(3) 4/105			None of the al	bove	
91.	Which among the	following OS does				
	(1) Windows NT	, and a colour		Windows 98	tasking truly?	
	(3) Windows XP			MS DOS	Palming of the control	
92.	In computers, sub	otraction is carried o				
	(1) 1's compleme				totrato (e)	
	(3) 2's compleme			9's compleme		
02				10's complem	nent	
93.			ighted	code?		
	(1) Decimal num		(2)	Excess-3 code	e	
	(3) Binary number	er system	(4)	None of the a	above	
94.	Cache memory ac	cts between:				
	(1) RAM and RO	PM .	(2)	CPU and RA	M	
	(3) CPU and Har	d Disk	(4)	) None		
95.	101111 - 010101 =	= ?				
	(1) 100100	(2) 011010	(3)	) 011001	(4) 110011	
96.	Keyboard shortcu	it for redo:				
	(1) Ctrl +Z	(2) Ctrl+ Y	(3	) Ctrl + X	(4) Shift + Y	
					A STATE OF THE PARTY OF THE PAR	

**97.** 1101 + 1100 in binary arithmetic?

- (1) 11001
- (2) 1100
- (3) 1001

(4) 0011

98. The address technique employed by a CPU is:

(1) Direct

(2) Indirect

(3) Immediate

(4) All of the above

99. Keys to switch between applications running in Windows OS:

(1) Ctrl + Tab

(2) Alt + Tab

(3) Shift + Tab

(4) Fn + Tab

**100.**  $(10.10) \times (01.01)$ 

(1) 011.0010

(2) 110.0011

(3) 001.1101

(4) None of the above

Q. NO.	Α	В	c	D
1	3	3	1	1
2	1	2	4	2
3	3	1	1	2
	2	2	4	2
4				
5	3	2	4	1
6	11	1	3	3
7	4	3	3	11
8	4	3	3	1
9	4	4	1	3
10	3	1	3	2
11	11	2	4	1
12	2	1	2	4
13	2	3	3	3
14	2	1	3	2
15	1	3	2	4
16	3	3	2	1
17	1	3	4	1
18	1	1	2	2
19	3	4	2	3
20	2	3	1	3
21	4	4	3	3
22	2	3	1	2
23	3	4	3	1
24	3	1	2	2
25	2	1	3	2
26	2	3	1	1
27	4	1	4	3
28	2	4	4	3
29	2	2	4	4
	1	2	3	1
30			1	2
31	4	2	4	1
32	3			
33	4	2	3	3
34	1	2	2	1
35	1	1 4	4	3
36	3	3	1	3
37	1	1	1	3
38	4	1	2	1
39	2	3	3	4
40	2	2	3	3
41	1	1	3	4
42	4	4	2	3
43	1	3	4	4
44	4	2	1	1
45	4	4	3	1
46	3	1	2	3
47	3	1	2	1
48	3	2	4	4
49	1	3	3	2

(Dr. Samdref Dalal)

Page 1 of & Dr. Goldeld M. Dr. Ballink

H Der

Q. NO.	Α	В	С	D
51	2	3	4	4
		2	3	2
52	1			3
53	3	4	4	
54	1	1	1	3
55	3	3	1	2
56	3	2	3	2
57	3	2	1	4
58	1	4	4	2
59	4	3	2	2
60	3	4	2	1
61	3	4	3	11
62	2	,3	2	4
63	4	2	1	1
64	1	2	2	4
65	3	2	2	4
66	2	2	1	3
67	2	1	3	3
68	4	4	3	3
69	3	2	4	1
70	4	1	1	3
71	3	1	4	3
72		4	3	2
	2			
73	1	1	2	4
74	2	4	2	1
75	2	4	2	3
76	1	3	2	2
77	3	3	1	2
78	3	3	4	4
79	4	1	2	3
80	1	3	1	4
81	4	4	1	3
82	3	2	2	1
83	2	3	2	3
84	2	3	2	2
85	2	2	1	3
86	2	2	3	1
87	1	4	1	4
88	4	2	1	4
89	2	2	3	4
90	1	1	2	3
91	1	3	2	4
92	4	1	1	3
93	3	3	3	2
94	2	2	1	2
95	4	3	3	2
96	1	1	3	2
			3	1
97	1	4		
98	2	4	1	4
99	3	4	4	2

(De Beers ) (on Suchvindenishing