DO NOT BREAK THE SEAL OF THE BOOKLET UNTIL YOU ARE TOLD TO DO SO

QUESTION BOOKLET

SERIES III

SUBJECTS : GENERAL ENGLISH, GENERAL STUDIES, COMPUTER SCIENCE

BOOKLET SERIAL NO.   0019

Marks : 200
Time : 2 hours

Read the following instruction carefully before you begin to answer the questions.

INSTRUCTIONS TO CANDIDATES

1. This booklet contains150 questions to be answered in a separate **OMR Answer Sheet** using **Black Ball Pen** in following two parts :

   Part - A- General English : 25 questions, Part - B- General Studies : 25 questions
   Part - C - Computer Science : 50 questions

2. All Questions are compulsory.

3. You will be supplied the Answer sheet separately by the invigilator. You must complete the details of particulars asked for.

4. Answer must be shown by completely blackening the corresponding circles in the Answer Sheet against the relevant questions number by Black Ball Pen. OMR Answer Sheet without marking series / double series marking shall not be evaluated.

Example :

Supposing the following questions is asked :-

The Capital of Meghalaya is -

A. Guwahati
B. Kohima
C. Shillong
D. Delhi

You will have four alternatives in the Answer Sheet for your response correspoding to each question of the Question Booklet as below :-

(A)   (B)   (C)   (D)

In the above illustration, if your chosen response is alternative C i.e. Shillong, then the same should be marked on the Answer Sheet by blackening the relevant circle with a Black Ball Point Pen only as below :-

(A)   (B)   ●   (D)

WHICH IS THE ONLY CORRECT MENTHOD OF ANSWERING

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

6. There will NOT be any negative marking for wrong answers.

7. The Answer Sheet must be handed over to the invigilator before you leave the Examination Hall.

8. No rough work is to be done on the Anwer Sheet. Space for rough work has been provided in the question booklet.

PART A- GENERAL ENGLISH

[Marks : 50]

Directions: (Q1-5): Read the passage given below and answer the questions that follow:

Sir Walter Scott was a man who was honest to the core of his nature: and his strenuous and determined efforts to pay his debts, or rather the debts of the firm with which he had become involved, have always appeared to us one of the grandest things in biography. When his publisher and printer broke down, ruin seemed to stare him in the face. There was no want of sympathy for him in his great misfortune. His friends came forward and offered to raise money enough to help him arrange with his creditors: 'No, said he proudly, 'this right-hand shall work it all off,' 'If we lose everything else,' he wrote to a friend, ' we will at least keep our honour unblemished.' While his health was already becoming undermined by overwork, he went on 'writing like a tiger', as he himself expressed it,until no longer able to yield a pen; and though he paid the penalty of his supreme efforts with his life; he nevertheless saved his honour and his self-respect.

1. **What is the main idea of the given passage ?**
   A) Printing and Publication as business ventures
   B) To pay his firm's debts
   C) To arrange an understanding with the creditors
   D) To keep his honour unblemished

2. **The word strenuous in this passage could best be replaced by which of the following word ?**
   A) Active
   B) Energetic
   C) Tireless
   D) Spirited

3. **What is the synonym of unblemished ?**
   A) Untarnished
   B) Imperfect
   C) Altered
   D) Flawed

4. **Which of the following statements best describes Walter Scott ?**
   A) A hardworking man
   B) A proud man
   C) A thoroughly honest man
   D) A sympathetic man

5. **Choose the antonym of undermined**
   A) Destabilised
   B) Weakened
   C) Improved
   D) Damaged

Directions: (Q6-10): Read the passage given below and answer the questions that follow:

Humanitarianism took many forms. It was evidenced in the widespread demand for "reform"- reform of society as preached by Rousseau, reform of economics as advocated by Adam Smith, reforms of laws as demanded by Beccaria and Bentham, reform of ethics as sponsored by Kant, reform of religion as urged by Voltaire and the deists by Wesley and the pietists. All such reform, it was contended, would make for human liberty, for human health and wealth, for human perfection. Indeed it was optimistically assumed that the study of man, his individual and social characteristics, would but prove how perfectible he is; how, if freed from the trammels of the past and reliant

only on his own reason, he would create a social, political, economic, ethical, and religious paradise on earth and would create it very soon.

6. **What kind of reform did the idea of humanitarianism demand for ?**
   A) Reform for society, economics, religions, deists and laws
   B) Reform of economics, ethics, religion and laws
   C) Reform of society, economics, laws, ethics, religion and deists
   D) Reform of society, deists, laws and religion.

7. **Who demanded reform of laws ?**
   A) Rosseau, Beccaria and Adam Smith
   B) Beccaria and Bentham
   C) Kant and Bentham
   D) Voltaire and Wesley.

8. **Through the reforms man would achieve which of the following ?**
   A) Human liberty, wealth and human health
   B) Human wealth, health and freedom
   C) Human health, wealth and human perfection
   D) Human liberty, health, wealth, and human perfection.

9. **Choose the synonym of the word " Contend"**
   A) Agreeable
   B) undisputed
   C) Struggle
   D) Uncontroversial

10. **Choose the antonym of the word "trammels"**
    A) Assistance
    B) Hindrance
    C) curbs
    D) limitations

Directions: (Q 11 - 12): Out of the four given alternatives, choose the one which can be substituted for the given words/sentence.

11. **The violation or profaning of sacred things**
    A) Sacrilege
    B) Sinecure
    C) Sensory
    D) Sanctimonious

12. **One who hates or is strongly prejudiced against women**
    A) Misogamist
    B) Misanthropist
    C) Misogynist
    D) Misobiblic.

Directions: (Q 13 - 14): In the following questions four alternatives are given for idioms and phrases. Choose the meaning of the given idiom/phrase.

13. **Gift of the gab**
    A) Fluency in music
    B) Fluency in speech
    C) Fluency in something
    D) Fluency in art

14. **Taken a leaf out of my book**
    A) Stole my page
    B) Sketched in my page
    C) Imitated me
    D) Mocked me

Directions: (Q 15 - 16): Rearrange the parts of the sentence in correct order and mark the correct option from the given four alternatives.

15. **The most picturesque**
    P- is the successful management of the game
    Q- element in the football match
    R- resulting from team work

    A) PQR
    B) QPR
    C) QRP
    D) PRQ

16. **Science has enabled us**
    P- of work is shorter time and
    Q- with less physical labour
    R- to do a much greater volume

    A) PQR
    B) RQP
    C) RPQ
    D) QRP

Directions: (Q 17 - 21): In the following passage there are blanks, each of which has been numbered, These numbers are printed below the passage and against each, four options are suggested, one of which fits the blank appropriately. Find out the appropriate word from the given options.

Culture is an important but can be a slippery, even a chaotic___(17)___. It can mean a ___(18)____ deal when its scope and relevance are___(19)___ defined and yet also very little, especially when it is used as synonymous for the the 'social'. To assert that culture is central does not mean that everything else is ___(20)___. When we consider the possible meanings, connotations and uses of the word 'culture', we face a mass of ___(21)___ and symbolic associations.

17.
    A) inkling
    B) concept
    C) issue
    D) impression

18.
    A) great
    B) boundless
    C) limitless
    D) limited

19.
    A) plainly
    B) naturally
    C) obviously
    D) clearly

20.

    A) impractical
    B) basic
    C) secondary
    D) uncomplicated

21
    A) interpretations
    B) knowledge
    C) data
    D) information

Directions (Q 22-25s): In the following questions, a sentence is given. Find out which part of the sentence has an error and choose the option corresponding to it. If the sentence is free from error; choose 'No Error.'

22. **The reason we have not been able to complete the work is due to fact that we did not receive instructions on time.**
    A) The reason we have not been able to complete the work
    B) Is due to fact
    C) That we did not receive instructions on time
    D) No error

23. **I should be obliged if you will help me.**
    A) I should
    B) Be obliged
    C) If you will help me
    D) No error

24. **He is a man whom I know is trustworthy and honest.**
    A) He is a man
    B) Whom I know
    C) Is trustworthy and honest
    D) No error.

25. **The audience of a football match are excited when a goal is scored**
    A) The audience
    B) Of a football match
    C) Are excited when a goal is scored
    D) No error

26. Who among the following was the socialist leader, who escaped from the Hazaribagh Prison and joined the Quit India Movement ?

    A) Ram Manohar Lohia

    B) Minoo Masani

    C) Jayprakash Narayan

    D) Achyut Patwardhan

27. The only session of the Indian National Congress which was addressed by Mahatma Gandhi was held at

    A) Amravati

    B) Belgaum

    C) Karachi

    D) Nagpur

28. Match the following columns

List-I	List-II
a) Reorganisation of States	1. Seventh Amendment
b) Sikkim became 22nd State of Indian Union	2. Thirty- sixth Amendment
c) Ninth Schedule Added	3. First Amendment
d) Abolition of Titles of Princes	4. Twenty-sixth Amendment

    A)   A-1, B-2, C-3, D-2

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

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

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

29. The elements of a group in the periodic table

    A) Have similar chemical properties

    B) Have consecutive atomic numbers

    C) Are isobars

    D) Are isotopes

30. Consider the following statement about acetylene :

    1. It is used in welding industry

    2. It is a raw material for preparing plastics

    3. It is easily obtained by mixing silicon carbide and water of these statements

    A)   1 and 2 are correct

    B)   1 and 3 are correct

    C)   2 and 3 are correct

    D)   1,2 and 3 are correct

31. Neutral water with pH about 7 becomes slightly acidic when aerated. This is because

    A)   Oxygen from air is dissolved in the water which makes the water acidic

    B)   Dirt, which get contaminated with the water during aeration makes the water acidic

    C)   Ultraviolet radiation dissociates water molecules and makes water acidic

    D)   Carbon-dioxide from air is dissolved

32. The enzyme involved in the oxidation of ethanol to form vinegar is

    A)   Zymase

    B)   Oxidase

    C)   Acetobacter

    D)   Invertase

33. Which of the following isotopes of carbon is/ are used in carbon dating ?

    A) $6C^{12}$ only

    B) $6C^{13}$ only

    C) $6C^{14}$ only

    D) $6C^{12}$ and $6C^{14}$

34. The founder president of All India Kisan Sabha was

    A)   Acharya Narendra Dev

    B)   Swami Sahajanand Saraswati

    C)   Bankim Mukherjee

    D)   Jayprakash Narayan

35. Which among the following statements with regard to Raju Rammohan Roy are correct?

1. He started the Atmiya Sabha
2. He wrote the Gift of Monotheist
3. He published the Percepts of Jesus
4. He founded the Brahmo Sabha

Select the correct answer
A) 2,3 and 4 only
B) 1,2 and 3 only
C) 1,3 and 4 only
D) 1,2,3 and 4

36. Which of the following was/were the new feature/features visible in the Quit India Movement (1942) ?

1. Large-scale movements in some of the industrial areas.
2. Large-scale mass involvement in some of the Princely States
3. Increase in the activities of the Kisan Sabha

Select the correct answer using the code given below.
A) 1,2 and 3
B) 1 only
C) 1 and 3 only
D) 3 only

37. Gas welding used for welding broken pieces of Iron, we normally use a mixture of :
A) Ethane and Oxygen
B) Ethene and Oxygen
C) Ethyne and Oxygen
D) Ethene and Air

38. Which one among the following does have an alliotrope ?
A) Oxygen
B) Sulphur
C) Nitrogen
D) Carbon

39. The characteristic odour of garlic is due to
A) a Chloro compound
B) a Sulphur compound
C) a Fluorine compound
D) Acetic acid

40. The chemical name of lime stone is
A) Calcium chloride
B) Calcium oxide
C) Calcium carbonate
D) Calcium

41. Match the column
A) A-3, B-4, C-1, D-2
B) A-1, B-2, C-3, D-4
C) A-3, B-2, C-1, D-4
D) A-1, B-4, C-3, D-2

42. First CNG based train of India started on 13 January, 2015 run between ____

List-I (Mineral)		List-II Industries in which largely used
A)	Limestone	1. Cement
B)	Copper	2. Electrical goods
C)	Bauxite	3. Manufacture of Aeroplanes
D)	Manganese	4. Steel

A) Rewari to Rohtak
B) Delhi to Mumbai
C) Rohtak to Nizamuddin
D) Howrah to Delhi

43. The company that has the tag line 'Connecting India' is ____
A) Airtel
B) BSNL
C) IDEA
D) Indian Telephone Industry

44. Television transmission is an example of which of the following ?
A) Simplex Communication
B) Half-duplex Communication
C) Full-duplex Communication
D) None of the above

45. Weibo is a social media platform popularly used in

A) South Korea

B) China

C) Thailand

D) Japan

46. Ozone content is maximum in areas

A) Near equator

B) Polewards of 50-degree latitude

C) Near the tropics

D) Equatorward of 25degree latitude.

47. Consider the following statements and choose the correct code:

1. The democratic left school of fundamental right sought the provision of socioeconomic rights.

2. The liberal school of fundamental rights sought the provision of negative rights, though made non justifiable.

A) 1 is true but 2 is false

B) 2 is true but 1 is false

C) 1 and 2 both are true

D) 1 and 2 both are false

48. Which of the following pairs of the Schedule in the Constitution of India and its Content is not correctly matched ?

A) Eighth Schedule:Languages

B) Second Schedule: The forms of oaths and affirmations

C) Fourth Schedule: Allocation of seats in the Council of States

D) Tenth Schedule: Provisions as to disqualification on the ground of defection

49. Match List-I with List-II about Chairman of different Constituent Assembly Committees and select the correct answer using the code given below :

List-I	List-II
a) Steering Committee	1. Sardar Vallabhbai Patel Committee
b) Fundamental Rights Sub-Committee	2. Dr. Rajendra Prasad
c) Union Constitution Committee	3. J.B Kripalani
d) Provincial Constitution Committee	4. Jawaharlal Nehru

A) A B C D : 2 3 4 1

B) A B C D : 1 4 3 2

C) A B C D : 2 4 3 1

D) A B C D : 1 3 4 2

50. How many types of emergencies have been envisaged under the Indian Constitution?

A) Two

B) Three

C) Four

D) One

PART C- COMPUTER SCIENCE

[Marks : 100]

51. What does the command 'uname-a' display in linux ?
    A) User information
    B) Available disk space
    C) System information
    D) Network Interface information

52. IPv6 addresses have a size of
    A) 256 bits
    B) 128 bits
    C) 64 bits
    D) 32 bits

53. Encryption and Decryption are features of
    A) Transport layer
    B) Session layer
    C) Data Link layer
    D) Presentation layer

54. Which later of OSI model provides a data transfer in the form of frames across the transmission link ?
    A) Physical layer
    B) Data Link layer
    C) Network layer
    D) Transport layer

55. Which of the following port number is used for Telnet ?
    A) 21
    B) 23
    C) 43
    D) 80

56. Semaphore is a/an _____ to solve the critical section problem
    A) Integer variable
    B) Special program for a system
    C) Digital circuit
    D) Hardware

57. Which of the following algorithm allocates fixed amount of CPU time to each I/O request, regardless of the size?
    A) First Come First Serve (FCFS)
    B) Shortest Job First (SJF)
    C) Round Robin (RR)
    D) None of the above

58. Which of the following linux command is used to to display the contents of the specified file (s)
    A) cp
    B) cat
    C) In
    D) we

59. RAID is an acronym for
    A) Reliable Arrays of Independent Disks
    B) Redundant Arrays of Internet Disks
    C) Redundant Arrays of Independent Disks
    D) Reliable Arrays of Internet Disks

60. Pattern matching is the process to
    A) To check if two strings are identical
    B) To compare two strings to know the count of similar characters
    C) To check if one string is present in the other string
    D) To check if two strings are of the same length

61. Which of the following command is used to zip files in linux ?
    A) gzip
    B) zip
    C) compress
    D) tar

62. A Decoder with enable input can function as a
A) Multiplexer
B) Demultiplexer
C) Encoder
D) None of the above

63. The outputs of Combinational Circuit are determined from
A) The previous outputs
B) The present combination of inputs
C) The combination of inputs and past outputs
D) All of the above

64. A Full adder consists of
A) One input and one output
B) Two inputs and one output
C) Two inputs and two outputs
D) Three inputs and two outputs

65. In a Data Flow Diagram, the process is represented by a/an
A) Square
B) Rectangle
C) Oval
D) Circle

66. Black Box Testing is also called as
A) Non-functional Testing
B) Functional Testing
C) Glass Box Testing
D) Unit Testing

67. What is the process of defining a method in a subclass having same name and type signature as a method in its superclass ?
A) Method Overriding
B) Method Overloading
C) Recursion
D) Method Hiding

68. What will be the output of the following program :
int main()
{
int a=10,b=10,
printf("ans=%d",a>b?a*:b/b);
return 0;

}
A) ans=100
B) ans=10
C) ans=0
D) ans=1

69. Which of the following C constants is invalid ?
A) 0001
B) 123.45
C) 0xfgf
D) 0xfff

70. The calloc function has
A) One argument
B) Two arguments
C) Three arguments
D) Four arguments

71. Which of the following expression is referring to the ith element of the array A ?
A) (A+i)
B) *(A+i)
C) (i +A)
D) &(A+i)

72. Which interface is used to create a Thread in JAVA
A) Iterable
B) Readable
C) Serializable
D) Runnable

73. In JAVA, which keyword is used to implement inheritance between classes
    A) Inherits
    B) MustInherits
    C) Extends
    D) Implements

74. MSIL is an acronym for
    A) Microsoft Interactive Language
    B) Microsoft Intermediate Language
    C) Microsoft Independent Language
    D) Microsoft Incorporative Language

75. Which of the following is the incorrect constructor type ?
    A) Copy Constructor
    B) Default Constructor
    C) Parameterized Constructor
    D) Friend Constructor

76. Which of the following operation signals a successful end of the transaction so that any changes (updates) executed by the transaction can be safely committed to the database and will not be undone
    A) COMMIT_TRANSACTION
    B) ROLLBACK (or ABORT)
    C) READ or WRITE
    D) END_ TRANSACTION

77. The surface of a magnetic disk consists of
    A) Tracks, sectors, blocks
    B) Circles, segments, sectors
    C) Tracks, segments, centre
    D) None of the above

78. In a recursive function, _____ must always be reachable
    A) Recursive case
    B) Explicit case
    C) Repetitive case
    D) Base case

79. Choose the output for the following sequence of operations
    Push(7), push(6), pop, push(2), push(7), pop, push(6), push(3)
    A) 762763
    B) 7263
    C) 6763
    D) 7627

80. Octal number equivalent to $(1110101)_2$ is
    A) 117
    B) 165
    C) 75
    D) 175

81. Which of the following query will display the first name of all the employees that starts with letter 'A'?
    A) Select FNAME from EMPLOYEE where FNAME=A%;
    B) Select FNAME from EMPLOYEE where FNAME=%A;
    C) Select FNAME from EMPLOYEE where FNAME like 'A%';
    D) Select FNAME from EMPLOYEE where FNAME like '%A';

82. Database structures, operations and constraints are defined at which level of the three schema architecture ?
    A) Internal Level
    B) Conceptual Level
    C) External Level
    D) None of the above

83. Address (Street, City, State, ZipCode, Country) is an example of
    A) Composite attribute
    B) Multivalued attribute
    C) Simple attribute
    D) Complex attribute

84. **Man made Information system can be categorized as**
    A) Strategic, Managerial and Operational
    B) Formal, Informal and Computer based
    C) Both (a) and (b)
    D) None of the above

85. **Which language is popular for Machine Learning ?**
    A) C Language
    B) Visual Basic
    C) Python
    D) C++

86. **Which of the following is not an advantage of distributed systems ?**
    A) Reliability
    B) Incremental growth
    C) Resource sharing
    D) None of these

87. **Which of the following statements is false ?**
    A) Any relation with two attributes is in BCNF
    B) A relation in which every key has only one attribute is in 2NF
    C) A prime attribute can be transitively dependent on a key in 3NF relation
    D) A prime attribute can be transitively dependent on a key in BCNF relation

88. **DROP TABLE cannot be used to drop a TABLE referenced by ____ constraint**
    A) Foreign Key
    B) Primary Key
    C) Unique Key
    D) Super Key

89. **When we pass an array as an argument to a function, what actually gets passed ?**
    A) Address of the array
    B) Values of the elements of the array
    C) Base address of the array
    D) Number of elements of the array

90. **A method to provide secure transmission of email is called**
    A) TLS
    B) SA
    C) IPSec
    D) PGP

91. **The ____ defines standard and consistent mechanisms to generate and process events**
    A) Data Model
    B) Waterfall Model
    C) Process Model
    D) Delegation Event Model

92. **An Entity type in ER model is represented by a**
    A) Diamond
    B) Rectangle
    C) Triangle
    D) Circle

93. **What is the full form of OLAP**
    A) On-Line Analysis Processing
    B) On-Line Application Processing
    C) On-Line Access Processing
    D) On-Line Analytical Processing

94. **In data warehousing, the function ____, typically gathers data from multiple, heterogeneous and external sources.**
    A) Data cleaning
    B) Data transformation
    C) Data extraction
    D) Load

95. **You are given data about seismic activity in Japan, and you want to predict a magnitude of the next earthquake, this is in an example of**
    A) Supervised learning
    B) Unsupervised learning
    C) Serration
    D) Dimensionality reduction

96. In _____ group are not predefined
    A) Association rules
    B) Clustering
    C) Classification
    D) Summarization

97. Extreme values that occur infrequently are called as _____
    A) Outliers
    B) Rare values
    C) NULL values
    D) Random values

98. In K-means clustering, the centre point is known as the
    A) Radius
    B) Centroid
    C) Medoid
    D) Median

99. Which of the following tree is used in BIRCH clustering algorithm
    A) B-Tree
    B) Binary Tree
    C) CF Tree
    D) General Tree

100. The categories in which Machine learning approaches can be traditionally categorized are _____
    A) Supervised Learning
    B) Unsupervised Learning
    C) Reinforcement Learning
    D) All of the above