

CEN.No.02/2014 Post : Junior Engineer (IT) D.O.E. : 14-12-2014

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THIS SHEET TO BE DETACHED/TORN OFF AND RETAINED BY INVIGILATOR ON COMPLETION OF EXAM / परीक्षा की पूर्ति पर इस पत्र को अलग करके/काटके निरीक्षक द्वारा रखा जाए

Duration : (2 Hours / 120 Minutes) समय : (2 घंटे / 120 मिनट)		Exam Code : TSD002 परीक्षा कोड :	
No. of Pages / पृष्ठों की संख्या : 208		Total Marks / कुल अंक : 150	
Roll No. : अनुक्रमांक:		Question Booklet No. : प्रश्न-पुस्तिका संख्या :	1022964
Date of Examination : परीक्षा तिथि :		OMR Answer sheet No. OMR उत्तर शीट क्र.	
Candidate's Name / परीक्षार्थी का नाम		Candidate's Signature / परीक्षार्थी का हस्ताक्षर	
*** As given in application form / आवेदन पत्र में दिये गये अनुसार ***			

**CANDIDATE SHOULD OPEN THE SEALS ONLY AFTER THEY ARE ASKED TO DO SO.
परीक्षार्थी निर्देश मिलने पर ही सील खोलें।**

The question paper is made up of the following sections as tabulated below :
निम्न तालिका में दर्शाये अनुसार, इस प्रश्न पत्र को निम्नलिखित भागों में विभाजित किया गया है :

Section/भाग	Language/भाषा	No. of Questions/प्रश्नों की संख्या	Pages/पृष्ठ	
			From/से	To/तक
Section - I	English	150	14	28
Section - II	Hindi/हिन्दी	150	29	45
Section - III	Urdu/उर्दू	150	46	64
Section - IV	Punjabi/पंजाबी	150	65	82
Section - V	Gujarati/गुजराती	150	83	99
Section - VI	Kannada/कन्नड़	150	100	116
Section - VII	Marathi/मराठी	150	117	133
Section - VIII	Odia/ओड़िया	150	134	151
Section - IX	Telugu/तेलुगु	150	152	169
Section - X	Konkani/कोंकणी	150	170	187
Section - XI	Tamil/तमिल	150	188	206

English Paragraph : "All the details given by me in the Application Form are true and complete to the best of my knowledge. I understand that I may be issued with Call letter for the exam on the basis of above information and mere issue of Call letter will not confer on me any right to be eligible for the post. I also understand that in case any of my statements are found to be untrue at any stage of recruitment or thereafter, I shall be disqualified forthwith for the post applied for and I shall be liable for any other penal action under the extant rules."

हिन्दी पैराग्राफ : "आवेदन पत्र में मेरे द्वारा दिये गये सभी विवरण मेरी अधिकतम जानकारी के अनुसार सत्य और पूर्ण हैं। मैं समझता/समझती हूँ कि मुझे परीक्षा के लिए उपर्युक्त सूचना के आधार पर बुलावा पत्र जारी किया जाएगा और केवल बुलावा पत्र जारी करना पद के लिए पात्र होने का मुझे कोई अधिकार नहीं देता है। मैं यह भी समझता/समझती हूँ कि यदि मेरा विवरण भर्ती के किसी चरण पर या तत्पश्चात् असत्य पाया जाता है, तो मैं आवेदित पद के लिए तत्काल निर्हरक हो जाऊंगा/जाऊंगी और मुझ पर लागू नियमों के तहत कोई अन्य दंडात्मक कार्रवाई की जाएगी"।

Signature of the Invigilator / निरीक्षक के हस्ताक्षर

TSD002414

INSTRUCTIONS

(Please read carefully and comply)

1. Kindly read the complete set of instructions carefully and also see the instructions on the back side of the OMR Answer Sheet and fill the details in the OMR Answer Sheet and Question Booklet.
2. One paragraph each in Hindi and English is given in page 1. Copying of the paragraph in the space provided in the OMR Answer Sheet (in the language as filled in the application form either in Hindi or English) in your running hand is **compulsory**. **DO NOT USE BLOCK LETTERS**.
3. (a) Question Booklet Serial No. must clearly be written and marked in the bubbles in the space provided in the OMR Answer Sheet.
(b) OMR Sheet No. should be written in the space provided in the Question Booklet.
4. After being instructed to open the Booklet, the candidates will open the seals. It is the responsibility of the candidate to check and ensure that the booklet contains **150** questions and start the paper from page no. **14**.
5. The question paper comprises **150** questions and are available in congruent versions of English, Hindi, Urdu, Punjabi, Gujarati, Kannada, Marathi, Odia, Telugu, Konkani and Tamil languages. **In case of any doubt or confusion, English version shall prevail.**
6. All questions are of Objective type. There is only one correct answer to each question carrying one mark. There will be negative marking for wrong answers. **For every wrong answer, 1/3 mark will be deducted.**
7. In the event of any mistake in any question/s, candidates will not be penalized. However no corrections will be made in question/s during the examination.
8. You must use **Blue or Black** ball-point pen only for answering. Altering of answers once entered is not permissible. Enter the answers in the Answer Sheet carefully.
9. Rough work, if any may be done in the Question Booklet only in the space provided at the end of the Booklet. No additional paper shall be provided.
10. Use of Log tables, Calculator, Slide rule, Mobile phone, Pager, Digital diary or any other electronic item/instrument, etc. is not allowed. Their use will result in disqualification.
11. No candidate should leave the examination hall before the final bell. The Answer Sheet as well as the Top Sheet of the Question Booklet should be handed over together to the invigilator before leaving the Examination Hall.

SECTION - I
ENGLISH

1. One of the following doesn't constitute a basic structure of the constitution :
 - (A) Republic form of Government
 - (B) Supremacy of the Constitution
 - (C) Law making procedure in the Parliament
 - (D) Federal character of the Indian Polity
2. Who is the present Chief Minister of Haryana ?
 - (A) Bhupinder Singh Hooda
 - (B) Captain Abhimanyu
 - (C) Manohar Lal Khattar
 - (D) None of the above
3. The primary job of the operating system of a computer is to :
 - (A) command resources
 - (B) manage resources
 - (C) provide utilities
 - (D) be user friendly
4. The process of converting analog signals into digital signals so that they can be processed by a receiving computer is referred to as :
 - (A) modulation
 - (B) demodulation
 - (C) synchronizing
 - (D) digitising
5. Multiprogramming was made possible by :
 - (A) input/output units that operate independently of the CPU
 - (B) operating systems
 - (C) both (A) and (B)
 - (D) neither (A) nor (B)
6. The dance form "Garaba" is from which of the following states ?
 - (A) Rajasthan
 - (B) Maharashtra
 - (C) Kashmir
 - (D) Gujarat
7. Semaphores are used to solve the problem of :
 - (A) mutual exclusion
 - (B) process synchronization
 - (C) both (A) and (B)
 - (D) none of the above
8. The drag-and-drop method of copying or moving data in MS Excel :
 - (A) Can be used between worksheets but not on workbooks
 - (B) Can be used between worksheets
 - (C) Can be used between workbooks
 - (D) Both (B) and (C)
9. The Prime Minister of India, Narendra Modi, represents which seat in Lok Sabha ?
 - (A) Vadodara
 - (B) Ahmedabad
 - (C) Varanasi
 - (D) Maninagar

10. In C language, printf(), the appearance of the output can be affected by :
(A) field width (B) conversion character
(C) flag (D) all of the above
11. The loss in signal power as light travels down the fiber is called :
(A) attenuation (B) propagation (C) scattering (D) interruption
12. If diameter of a circle increases by 30%, by what percent will the area of the circle increase ?
(A) 30% (B) 69% (C) 90% (D) 138%
13. Internet, initially started as :
(A) TCP/IP experiment
(B) Network for the defence forces of America
(C) Group of research scientists of Bell Lab
(D) Contribution was done by all the above institutions
14. Who was the ruler of India when the East India Company was set up ?
(A) Aurangzeb (B) Akbar (C) Jahangir (D) Shahjahan
15. The Saka era began in the year :
(A) 58 BC (B) 78 BC (C) 58 AD (D) 78 AD
16. In C language, the single character input/output functions are :
(A) scanf () and printf () (B) getchar () and printf ()
(C) scanf () and putchar () (D) getchar () and putchar ()
17. Cookies are used to do which of the following ?
(A) Store your ID and password for subsequent logons to the site
(B) Store contents of electronic shopping carts
(C) To track web activity
(D) All of the above
18. The process of arranging data in alphabetical or numerical order is called _____.
(A) Sorting (B) Searching (C) Traversal (D) Merging
19. By selling a towel for ₹ 126.90, a draper loses 6%. For how much should he sell the towel to gain 4% ?
(A) ₹ 130 (B) ₹ 140.40 (C) ₹ 145.05 (D) ₹ 160
20. In Binary Algebra, $A + B$ can be implemented by :
(A) NAND gates alone (B) NOR gates alone
(C) AND gates alone (D) Both (A) and (B)

21. The product of three consecutive numbers is always divisible by :
(A) 4 (B) 6 (C) 8 (D) 5
22. In SQL, which of the following is **not** a Data Manipulation Language Command ?
(A) Delete (B) Select (C) Update (D) Create
23. In C language, the "break" statement is used to exit from :
(A) a do loop (B) a for loop
(C) a switch statement (D) all of the above
24. C is :
(A) an assembly language (B) a third generation high-level language
(C) a machine language (D) all of the above
25. Which country is the current winner of the ICC World Twenty 20 Cricket Championship ?
(A) Sri Lanka (B) India (C) Australia (D) Pakistan
26. System Implementation Phase in System Analysis and Design entails :
(A) System check outs (B) Pilot run
(C) Parallel runs (D) All of the above
27. If $99x + 101y = 299$ and $101x + 99y = 301$, then the correct solution is :
(A) $x = 1, y = 2$ (B) $x = 3, y = 1$ (C) $x = 1, y = 3$ (D) $x = 2, y = 1$
28. The movement that came to abrupt end due to the Chauri-Chaura incident was :
(A) Quit India Movement (B) Home Rule Movement
(C) Non-Cooperation Movement (D) Civil Disobedience Movement
29. Who is the present Foreign Minister of India ?
(A) Rajnath Singh (B) Arun Jaitley (C) Narendra Modi (D) Sushma Swaraj
30. Applications software :
(A) is used to control the operating system
(B) includes programs designed to help programmers
(C) performs a specific task for computer users
(D) all of the above
31. Paging :
(A) is a method of memory allocation by which the program is subdivided into equal portions, or pages and core is subdivided into equal portions or blocks.
(B) consists of those addresses that may be generated by a processor during execution of a computation.
(C) is a method of allocating processor time.
(D) allows multiple programs to reside in separate areas of core at the time.

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32. In SQL, which command is used to change data in a table ?
(A) Update (B) Insert (C) Browse (D) Append
33. What is the product of all the numbers in the dial of a telephone ?
(A) 1,58,480 (B) 1,59,450 (C) 1,59,480 (D) None of these
34. A compiler is :
(A) a program that places programs into memory and prepares them for execution.
(B) a program that automates the translation of assembly language into machine language.
(C) program that accepts a program written in a high level language and produces an object program.
(D) is a program that appears to execute a source program as if it were machine language.
35. _____ normally certifies a site on the internet as secure site.
(A) CRISIL (B) CRA (C) Verisign (D) None of the above
36. National Securities Depository limited (NSDL) deals with :
(A) Bearer Bonds (B) GDRs
(C) Shares in electronic format (D) None of the above
37. A computer based information system is needed because :
(a) The size of organization has become large and data is massive
(b) Timely decisions are to be taken based on available data
(c) Computers are available
(d) Difficult to get clerks to process data
(A) (b) and (c) (B) (a) and (b) (C) (a) and (d) (D) (c) and (d)
38. Find the missing number :
2, 10, 30, 68,
(A) 130 (B) 140 (C) 142 (D) 138
39. Which of the following is an advantage of using fiber optics data transmission ?
(A) resistance to data theft
(B) fast data transmission rate
(C) low noise level and few transmission errors
(D) all of the above
40. RAM is used as a short memory because it :
(A) is volatile (B) is very expensive
(C) has small capacity (D) is programmable

41. The basic goal of software engineering is to _____.
- (A) produce high quality software at low cost
(B) modify programs
(C) design systems and logic
(D) produce high quality software irrespective of cost
42. Select the smallest memory size.
- (A) Terabyte (B) Gigabyte (C) Kilobyte (D) Megabyte
43. In each of the following questions the two words given on one side of double colon i.e., :: bear a certain relationship. The other side shows an incomplete pair marked by a missing word which bears a similar relationship with the given word. Find the missing word out of the options (A) (B) (C) (D).
- Raipur : Chhattisgarh :: ? : Uttaranchal
- (A) Nainital (B) Ranchi (C) Dehradun (D) Bhopal
44. Who acted as the Chairman of the Drafting Committee of the Constituent Assembly ?
- (A) Dr. B. R. Ambedkar (B) C. Rajagopalachari
(C) Dr. Rajendra Prasad (D) Jawahar Lal Nehru
45. Find the odd one from the given words :
- (A) Kidney (B) Heart (C) Eye (D) Lung
46. In C++, a function contained within a class is called :
- (A) a member function (B) an operator
(C) a class function (D) a method
47. A and B together can do a piece of work in 10 days. B and C together can do it in 12 days, while A and C together can do it in 15 days. C alone can complete it in :
- (A) 50 days (B) 40 days (C) 30 days (D) 20 days
48. 25 buses are plying from Nagpur to Pune and back. In how many ways can a passenger travel from Nagpur, in any one bus, to Pune but return to Nagpur by a different bus.
- (A) 50 (B) 49
(C) 600 (D) None of the above
49. What does the acronym (ISDN) stand for ?
- (A) Integrated Services Digital Network
(B) Intelligent Standard Digital Network
(C) Indian Services Digital Network
(D) Integrated Services Data Network

50. Which country has won the Gold medal in Men's Hockey in recently concluded Asian Games ?
(A) Pakistan (B) India (C) South Korea (D) Malaysia
51. Modularity in Software Engineering :
(A) is a feature of all programming languages
(B) helps make large programs more understandable
(C) both (A) and (B)
(D) nor (A) or (B)
52. In a group of 6 boys and 4 girls, four children are to be selected. In how many different ways can they be selected such that at least one boy should be there ?
(A) 159 (B) 209 (C) 318 (D) None of these
53. Encryption is being used primarily with :
(A) transaction entry (B) computer processing
(C) file retention (D) data communication
54. Data integrity refers to :
(A) the privacy of data (B) the simplicity of data
(C) the validity of data (D) the security of data
55. Which film has won the National award for the best feature film this year ?
(A) Bhag Milkha Bhag (B) Shahid
(C) Jolly LLB (D) Gulab Gang
56. The _____ sort divides the array into sorted and unsorted sublists.
(A) selection (B) bubble (C) insertion (D) all of the above
57. Which is true of constructors in JAVA ?
(A) They have the same name as the class and have no return type.
(B) They can take a parameter that is of the same class type.
(C) If no constructor is defined for a class, the compiler supplies a default constructor.
(D) All of the above
58. The simultaneous transmission of data to a number of stations is known as :
(A) Broadcast (B) Band width (C) Aloha (D) Analog transmission
59. Which command brings you to the first slide in your PowerPoint presentation ?
(A) Next Slide button (B) PAGE UP
(C) CTRL + HOME (D) CTRL + END

60. Which are the tools **not** used for System Analysis ?
 (A) System - test data (B) Decision table
 (C) Data Flow Diagram (D) Flow charts
61. A (n) _____ search begins the search with the first array element.
 (A) serial (B) random (C) parallel (D) binary
62. A computer program that converts assembly language to machine language is :
 (A) Compiler (B) Interpreter (C) Assembler (D) Comparator
63. Name the boxer who was banned by International Boxing Association for refusing to accept the medal during Asian Games 2014 ?
 (A) M. C. Mary Kom (B) Sarita Devi
 (C) Sarjubala Devi (D) None of the above
64. If TAP is coded as SZO, then how is FREEZE coded ?
 (A) EQDFYG (B) ESDFYF (C) GQFDYF (D) EQDDYD
65. Find the missing letters.
 AZ, BY, CX, DW,
 (A) EU (B) EV (C) EW (D) FW
66. *Subclass* in JAVA is also called :
 (A) base class (B) child class (C) derived class (D) both (B) and (C)
67. Which of the following sorting procedures is the slowest ?
 (A) Quick sort (B) Heap sort (C) Shell sort (D) Bubble sort
68. The missing figure in the question $\frac{3}{9} \times \frac{?}{6} \times \frac{3}{15} = \frac{1}{18}$ is :
 (A) 6 (B) 5 (C) 4 (D) 3
69. The four icons used in building Data Flow Diagram are :
 (A) Flow, Source, Store and Process
 (B) Flow, Process, Source and Store
 (C) Flow, Process, Source/Destination and Store
 (D) Source, Process, Destination and Store
70. The linker :
 (A) is the same as the loader
 (B) is required to create a load module
 (C) uses source code as input
 (D) is always used before programs are executed

71. ERP stands for :
- (A) Enterprise Resolution Planning (B) Enterprise Reverse Planning
(C) Enterprise Resource Planning (D) None of the above
72. Which one of the following is the largest single source of the Government's earning from tax revenue ?
- (A) Central Excise (B) Income Tax (C) Customs Duty (D) Corporation Tax
73. You can delete text in MS Word by :
- (A) selecting the text and pressing the CTRL key
(B) selecting the text and pressing the DELETE key
(C) selecting the text and pressing the ALT + PAGEUP key
(D) selecting the text and pressing the ESC key
74. Which of the following is **not** an operating system ?
- (A) DOS (B) Oracle (C) Linux (D) Windows
75. The price of a table and chair is in the ratio 25 : 6. If the table costs ₹ 950 more than the chair, then cost of two chairs is :
- (A) ₹ 250 (B) ₹ 300 (C) ₹ 500 (D) ₹ 600
76. Fifth generation computers are likely to exhibit :
- (A) artificial intelligence (B) heuristic behaviour
(C) advanced parallel processing (D) all of the above
77. A man rows 750 m in 675 seconds against the stream and returns in 450 seconds. His rowing speed in still water is :
- (A) 3 km/hr (B) 4 km/hr (C) 5 km/hr (D) 6 km/hr
78. Who is the present Chief Minister of Gujarat ?
- (A) Anandiben Patel (B) Keshubhai Patel
(C) Amit Shah (D) None of the above
79. The OCR stands for :
- (A) Outsized Character Reader (B) Optical Character Recognition
(C) Operational Character Reader (D) Only Character Reader
80. A flip-flop can store :
- (A) One bit of data (B) Two bits of data
(C) Three bits of data (D) Any number of bits of data

81. The correct matching for the following pairs is :
- | | |
|-----------------------------|--------------------|
| (a) DMA I/O | (i) High speed RAM |
| (b) Cache | (ii) Disk |
| (c) Interrupt I/O | (iii) Printer |
| (d) Condition Code Register | (iv) ALU |
- (a) (b) (c) (d)
- (A) (iv), (iii), (i), (ii)
 (B) (ii), (i), (iii), (iv)
 (C) (iv), (iii), (ii), (i)
 (D) (ii), (iii), (iv), (i)
82. Which of the following places does **not** have a Rail Coach Factory ?
 (A) Kapurthala (B) Kolkata (C) Perambur (D) Rai Bareli
83. A tree 6 m tall casts a 4 m long shadow. At the same time, a flag pole casts a 50 m long shadow. How long is the flag pole ?
 (A) 75 m (B) 100 m (C) 150 m (D) 50 m
84. If $B = 2$, $H = 8$ and $CAB = 6$, then what is the number value of RACE ?
 (A) 31 (B) 30 (C) 28 (D) 27
85. Which of the following are typical characteristics of a RISC machine ?
 (A) Instruction taking multiple cycles
 (B) Highly pipelined
 (C) Multiple register sets
 (D) Both (B) and (C)
86. Which of the following codes needs 7 bits to represent a character ?
 (A) ASCII (B) BCD (C) EBCDIC (D) GRAY
87. Three partners A, B and C invest ₹ 600, ₹ 900 and ₹ 1200 respectively in a business. If they have a profit of ₹ 549, then C's share of profit is :
 (A) ₹ 122 (B) ₹ 183 (C) ₹ 244 (D) ₹ 256
88. The main cause of acid rain (acid precipitation) is :
 (A) SO_2 (B) NO_2 (C) CH_4 (D) All of these
89. A tap can fill a tank in 16 minutes and another can empty it in 8 minutes. If the tank is already half full and both the taps are opened together, the tank will be :
 (A) filled in 12 minutes (B) emptied in 12 minutes
 (C) filled in 8 minutes (D) emptied in 8 minutes

90. A number consists of two digits whose sum is 11. If 27 is added to the number, then the digits change their places. What is the number ?
(A) 47 (B) 65 (C) 83 (D) 92
91. Two trains travel in opposite direction at 36 km/hr and 45 km/hr and a man sitting in slower train passes the faster train in 8 seconds. The length of the faster train is :
(A) 80 m (B) 100 m (C) 120 m (D) 180 m
92. Which language has recently become the defacto standard for interfacing application programs with relational database system ?
(A) Oracle (B) SQL (C) dBASE (D) 4GL
93. Which of the following is **not** a characteristic of a relational database model ?
(A) tables (B) treelike structure
(C) complex logical relationships (D) records
94. A hard disk becomes totally inaccessible when a computer virus corrupts its :
(A) partition table (B) file allocation table
(C) route directory (D) boot sector
95. In JAVA, Exceptions that are expected to possibly occur are called :
(A) checked exceptions (B) unchecked exceptions
(C) runtime exceptions (D) errors
96. Data dictionary contains detail of :
(A) data structures (B) data flows (C) data stores (D) all of the above
97. A car covers three successive 4 km distances at speed of 10 kmph, 20 kmph and 60 kmph respectively. Its average speed over total distance is :
(A) 10 kmph (B) 20 kmph (C) 25 kmph (D) 30 kmph
98. To promote encapsulation, JAVA provides an access modifier of type :
(A) public (B) private (C) protected (D) none of these
99. Moving process from main memory to disk in computer terminology is called :
(A) scheduling (B) caching (C) swapping (D) spooling
100. Programming in a language that actually controls the path of signals or data within the computer is called :
(A) micro programming
(B) systems programming
(C) assembly language programming
(D) machine language programming

101. Who gave the title of "Sardar" to Vallabhbbhai Patel ?
(A) C. Rajagopalachari (B) Mahatma Gandhi
(C) Jawahar Lal Nehru (D) Dr. Rajendra Prasad
102. Error detection at the data link level is achieved by :
(A) Bit stuffing (B) Hamming codes
(C) Cyclic redundancy code (D) Equalization
103. Bug in computer terminology means _____ .
(A) a logical error in a programme
(B) a difficult syntax error programme
(C) documenting programmes using efficient documentation tool
(D) a logical error in text
104. Which two files are used during operation of the DBMS ?
(A) query language and utilities
(B) data manipulation language and query language
(C) data dictionary and transaction log
(D) data dictionary and query language
105. Which of the following will **not** advance the slides in Slide Show view in PowerPoint Presentation ?
(A) the ESC key (B) the Spacebar (C) the ENTER key (D) the mouse button
106. Page fault occurs when :
(A) the page is corrupted by application software
(B) the page is in main memory
(C) the page is not in main memory
(D) one tries to divide a number by 0
107. The base of a rectangular solid is a square, and its height is twice its length. If its volume is 1024 cm^3 , then surface area of its surface is :
(A) 560 cm^2 (B) 640 cm^2 (C) 680 cm^2 (D) 720 cm^2
108. If volume and surface area of a sphere are numerically the same, then its radius is :
(A) 1 (B) 2 (C) 3 (D) 4
109. 300 grams of sugar solution has 40% sugar in it. How much sugar should be added to make it 50% in the solution ?
(A) 10 gm (B) 40 gm (C) 60 gm (D) 80 gm
110. The inter connectivity of computers to a common server within a small area is known as _____ .
(A) LAN (B) WAN
(C) WWW (D) None of the above

111. The ratio of Meena's age to the age of her mother is 3 : 8. The difference of their age is 35 years. The ratio of their age after 5 years will be :
(A) 7 : 12 (B) 5 : 12 (C) 38 : 43 (D) 42 : 47
112. Which one of the items given below is **not** an item of the Menu Bar in MS Word ?
(A) Root (B) Tools (C) View (D) Exit
113. The maximum strength of Lok Sabha is :
(A) 552 (B) 544
(C) 642 (D) None of the above
114. The simple interest is equal to compound interest for a certain sum when :
(A) rate is same
(B) time is same
(C) interest is computed annually and time is one year
(D) none of the above
115. Indicate which one of the following best describes the term Software ?
(A) Application programme only
(B) Operating System programme only
(C) Control system
(D) Both (A) and (B)
116. An enterprising businessman earns an income of ₹ 1 on the first day of his business. On every subsequent day, he earns an income which is just double of that made on the previous day. On the 10th day of business, his income is :
(A) ₹ 2⁹ (B) ₹ 2¹⁰ (C) ₹ 10 (D) ₹ 10²
117. If $\frac{\log 16}{\log 2} = x$, then value of x is :
(A) 4 (B) $\frac{1}{3}$ (C) 2 (D) 5
118. Which comet appears every 76 years ?
(A) Hailey's (B) Holme's (C) Donati's (D) Alpha Centauri
119. In JAVA, Automatic conversion from primitive type to an object of the corresponding wrapper class is called :
(A) coercing (B) casting (C) boxing (D) widening
120. A flip-flop circuit can be used for :
(A) counting (B) scaling (C) demodulation (D) both (A) and (B)

121. Kernel is :
- (A) considered as the critical part of the operating system.
 - (B) the software which monitors the operating system.
 - (C) the set of primitive functions upon which the rest of operating system functions are built-up.
 - (D) none of the above.
122. Which country is the winner of FIFA World Cup 2014 for Men ?
- (A) Germany
 - (B) Spain
 - (C) Argentina
 - (D) Brazil
123. The longest tape which can measure exactly the length of 8 m 25 cm, 6 m 75 cm and 4 m 50 cm is :
- (A) 35 cm
 - (B) 75 cm
 - (C) 1 m 50 cm
 - (D) 45 cm
124. Almost every C program begins with the statement :
- (A) `main ()`
 - (B) `printf ()`
 - (C) `#include <stdio.h>`
 - (D) `scanf ()`
125. A car can finish a certain journey in 10 hours at a speed of 48 km/hr. In order to cover the same distance in 8 hours, the speed of the car must be increased by :
- (A) 6 km/hr
 - (B) 7.5 km/hr
 - (C) 12 km/hr
 - (D) 15 km/hr
126. Which of the following might be the output as a result of using a CASE tool ?
- (A) programming code
 - (B) flow charts and data flow diagrams
 - (C) prototypes and cost/benefit analysis
 - (D) all of the above
127. Which of the following is a service **not** supported by the operating system ?
- (A) Protection
 - (B) Accounting
 - (C) Compilation
 - (D) I/O operation
128. Who among the following stood for total revolution in the country ?
- (A) Jayaprakash Narayan
 - (B) Jyotiba Phule
 - (C) V. P. Singh
 - (D) Mahatma Gandhi
129. The eleventh part of $990 \times \frac{990}{990}$ is :
- (A) 99.0
 - (B) 99.99
 - (C) 90
 - (D) 90.9
130. The main function of the dispatcher (the portion of the process scheduler) is :
- (A) swapping a process to the disk
 - (B) assigning ready process to the CPU
 - (C) suspending some of the processes when the CPU load is high
 - (D) bring processes from the disk to the main memory

131. The TCP/IP protocol used for transferring e-mail messages from one machine to another is :
(A) FTP (B) SNMP (C) SMTP (D) RPC
132. In OSI network architecture, the dialogue control and token management are responsibilities of :
(A) session layer (B) network layer (C) transport layer (D) data link layer
133. Software cost increases because :
(A) each application will need the generation of new programs.
(B) purchasing of new equipment means that existing software will either have to be modified or rewritten.
(C) programming is labour intensive and therefore strongly affected by inflation despite new techniques
(D) all of the above
134. A merchant buys tea A @ ₹ 8 per kg and tea B @ ₹ 14 per kg. The two brands of tea, he mixed and sells the mixture @ ₹ 12 per kg. If profit realized is 20%, then ratio of two brands of tea in the mixture is :
(A) 15 : 2 (B) 1 : 16 (C) 2 : 1 (D) none of these
135. A stack is a linear data structure in which data is stored and retrieved in a :
(A) Last Out First In (LOFI) (B) Last In First Out (LIFO)
(C) First In First Out (FIFO) (D) Last Out Last In (LOLI)
136. The data dictionary tells the DBMS :
(A) what files are in database (B) what attributes are possessed by the data
(C) what these files contain (D) all of the above
137. River flowing towards the West is :
(A) Godavari (B) Krishna (C) Kaveri (D) Narmada
138. Which segment do eBay, Amazon.com, Flipkart, Snapdeal belong ?
(A) B2Bs (B) B2Cs (C) C2Bs (D) C2Cs
139. Who was the first Indian born citizen to have won the Noble Prize for Peace ?
(A) Rabindranath Tagore (B) Mother Teresa
(C) Kailash Satyarthi (D) Amartya Sen
140. The first step in Systems Development Life Cycle is :
(A) database design
(B) system design
(C) preliminary investigation and analysis
(D) graphical user interface

141. The most common use of the one-dimensional array in C is the :
(A) string (B) character (C) data (D) function
142. The secondary storage device that follows the sequential mode of access is :
(A) Optical Disk (B) Magnetic Disk (C) Magnetic Tape (D) None of these
143. The Central Processing Unit (CPU) consists of :
(A) input, output and processing
(B) control unit, primary storage and secondary storage
(C) control unit, arithmetic-logic unit and primary storage
(D) control unit, processing and primary storage
144. Which of the following is the main factor of water pollution ?
(A) Smoke (B) Industrial waste (C) Ammonia (D) Detergents
145. Find the probability of getting a head in a throw of a coin.
(A) $\frac{1}{2}$ (B) 1 (C) 2 (D) none of these
146. Who didn't participate in the revolt of 1857 ?
(A) Rani Lakshimibai (B) Bhagat Singh
(C) Nana Saheb (D) Tantya Tope
147. Bulletin board system :
(A) is a public access message system
(B) is a modem capable of accepting commands
(C) converts analog signals to digital signals
(D) converts digital signals to analog signals
148. Who is regarded as the Father of computers ?
(A) Abascus (B) John Napier (C) Pascal (D) Charles Babbage
149. Structured programs do **not** include :
(A) Loops (B) GOTO statements
(C) DO-WHILE statement (D) All of the above
150. Which of the following is **not** a primitive data type in JAVA ?
(A) boolean (B) byte (C) string (D) double

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