



**PROPOSED KEY ANSWERS FOR THE  
WRITTEN EXAMINATION CONDUCTED  
FOR THE POST OF ASSISTANT PROGRAMMER**

**(Notification No.17/2021, dated 07.02.2021)**

The proposed key answers, marked in the Question Booklet (A-Series), for the written examination conducted on 10.07.2021 (Saturday) for the post of 'Assistant Programmer' are hosted herewith.

Any objection with regard to any of the proposed key answer should be sent by the candidates to the Registrar (Recruitment), High Court, Madras, by e-mail ([recruitment.mhc@gov.in](mailto:recruitment.mhc@gov.in)) within two days from today. In such communication, Registration Number, Name and address of the candidate, Question Number and answer for such question, according to the candidate, with supporting material for such claim, should invariably be quoted. Any representation received after two days or without any of the above requisite particulars will receive no attention.

Dated: 26.07.2021.  
Place: High Court, Madras.

Sd/- xxxxx  
Registrar (Recruitment).

# MHAP 1746

Booklet Series :

# A

Registration  
No.

Booklet No.

10253

Time : Three Hours

Max Marks: 150

## IMPORTANT INSTRUCTIONS TO CANDIDATES

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Read the following instructions carefully before you begin to answer the questions.  
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1. The Candidate will be supplied with Question Booklet 15 minutes before commencement of the examination.
2. This Question Booklet contains 150 objective type questions. Before answering, the candidates are requested to check whether all the questions are in seriatim and ensure that there are no blank pages / Questions in the question booklet. In case any defect is noticed, it shall be reported to the Invigilator within first 10 minutes and get it replaced with a new same series Question Booklet. After 10 minutes of the commencement of the examination, it will not be replaced.
3. Each Question carries one mark (No negative mark will be deducted for the wrong answer except Part D Questions. **For each incorrect answer in Part D, 1/4 (0.25) mark will be deducted**).
4. You must write your Register Number in the space provided on the top left side of the page without fail. Do not write anything else in the Question Booklet.
5. Personalized OMR Answer Sheets of the Candidates will be supplied by the invigilator for answering the Questions. If the OMR Answer Sheet is, in anyway defective, the same shall be brought to the notice of the Invigilator immediately before shading, so as to supply a spare OMR answer sheet.
6. You must write and shade your Question Booklet number in the space provided in the OMR Answer Sheet without fail with Blue or Black Ball point pen only.

Please see the last page of this booklet for rest of the instructions.

SEAL

10528

**PART A**

1. Did the boys turn \_\_\_\_\_ for football practice?  
 (A) Up (B) On  
(C) Back (D) In
2. His manners \_\_\_\_\_ him.  
(A) Speak (B) speak for  
(C) speak out  (D) Speak of
3. When we get ready for dinner, I have to take my books \_\_\_\_\_ the table.  
(A) of (B) from  
 (C) off (D) out
4. You must be back \_\_\_\_\_ four o'clock.  
 (A) by (B) in  
(C) to (D) for
5. Synonym of mellow-  
(A) melodious  (B) genial  
(C) dramatic (D) fruity
6. Antonym of acquitted  
(A) jailed (B) exonerated  
(C) accused  (D) convicted
7. He is too miserly to part \_\_\_\_\_ his money.  
(A) from  (B) with  
(C) to (D) in
8. Which word does not belong with the others?  
(A) wing (B) fin  
 (C) beak (D) rudder

9. The union leader was very critical \_\_\_\_\_ the attitude of the management.  
(A) for  
(B) at  
(C) on  
(D) of
10. I congratulated Seeta \_\_\_\_\_ her success in the examination.  
(A) on  
(B) by  
(C) in  
(D) with
11. Yesterday Geetha \_\_\_\_\_ school early to receive her parents at the railway station.  
(A) went  
(B) entered  
(C) left  
(D) delayed
12. People from \_\_\_\_\_ and near came to see the final match of the tournament yesterday.  
(A) distance  
(B) long  
(C) above  
(D) far
13. Read the sentence and find out grammatical/idiomatic error in it.  
The Headmaster of the school / along with other teachers are coming /  
(A) (B)  
to attend the meeting / scheduled to be held this afternoon  
(C) (D)
14. One who looks on the bright side of things-  
(A) pessimist  
(B) optimist  
(C) infallible  
(D) hypocrite
15. Find the correctly spelt word.  
(A) maintainance  
(B) maintaince  
(C) mentaince  
(D) maintenance

## PART B

16. காமராஜரை 'கல்விக்கண் திறந்தவர்' என மனதார பாராட்டியவர்  
(A) அறிஞர் அண்ணா (B) தந்தை பெரியார்  
(C) ராஜாஜி (D) பட்டுக்கோட்டை பிரபாகர்
17. பிறர் நமக்கு செய்யும் தீங்கை பொறுத்துக்கொள்வது \_\_\_\_\_ ஆகும்.  
(A) வம்பு (B) அமைதி  
(C) அடக்கம் (D) பொறை
18. செம்மொழி - பிரித்து எழுத கிடைப்பது  
(A) செம் + மொழி (B) செம்மை + மொழி  
(C) செ + மொழி (D) செந் + மொழி
19. சார்பெழுத்துக்கள் எத்தனை வகைப்படும்?  
(A) 10 (B) 30  
(C) 12 (D) 18
20. உள்ளூவது எல்லாம் உயர்வுள்ளல் மற்றது தள்ளினும்  
(A) தள்ளாமை நீர்த்து (B) தள்ளினும் நீர்த்து  
(C) நீங்காவிடும் (D) வந்து உயர்த்து
21. பெருமை + வானம் என்பதை சேர்த்து எழுதக் கிடைப்பது  
(A) பெருமைவானம் (B) பெருவானம்  
(C) பெரும்வானம் (D) மேற்கண்ட எதுவுமில்லை
22. பொன்னியின் செல்வன் என்ற நாவலை எழுதியவர் யார்?  
(A) சாண்டில்யன் (B) வைரமுத்து  
(C) பார்த்தசாரதி (D) கல்கி
23. மணிமேகலை காப்பியத்தின் ஆசிரியர்  
(A) இளங்கோவடிகள் (B) சீத்தலை சாத்தனார்  
(C) ஒட்டக்கூத்தன் (D) கபிலர்

24. தீரா இடும்பை தருவது எது?  
 (A) குணம், குற்றம் (B) பெருமை, சிறுமை  
 (C) ஆராயாமை, ஐயப்படுதல் (D) நாடாமை, பேணாமை
25. 'சாகும்போதும் தமிழ் படித்துச் சாகவேண்டும் -- என்றன் சாம்பலும் தமிழ் மணந்து வேகவேண்டும்' என்று கூறியவர் --  
 (A) பெருஞ்சித்தனார் (B) இளங்குமரனார்  
 (C) சச்சிதானந்தன் (D) பாரதிதாசன்
26. கம்பர் தாம் இயற்றிய காவியத்திற்கு இட்ட பெயர்  
 (A) இராம காதை (B) இராம அவதாரம்  
 (C) இராம சரிதம் (D) இராம புராணம்
27. சாகித்திய அகாடமி விருதுபெற்ற கி.ரா. வின் நூல் எது?  
 (A) கோபல்லபுரத்து மக்கள் (B) மாயமான்  
 (C) கரிசல்காட்டு கடுதாசி (D) அந்தமான் நாயக்கர்
28. 'விசனம்' -- சொல் தரும் பொருள் யாது?  
 (A) அச்சம் (B) மகிழ்ச்சி  
 (C) கவலை (D) ஏக்கம்
29. கீழ்க்கண்டவற்றுள் ஆண்டாளின் படைப்பு எது?  
 (A) திருவெம்பாவை (B) திருமாலை  
 (C) திருவாய் மொழி (D) நாச்சியார் திருமொழி
30. வாடிய பயிரைக் கண்டபோ தெல்லாம் வாடினேன் பசியினால் இளைத்தே/இந்த பாடல் வரி இடம்பெற்றுள்ள நூல் மற்றும் ஆசிரியர் பெயர் என்ன?  
 (A) பாஞ்சாலிசபதம், பாரதியார்  
 (B) பத்துப்பாட்டு, பெருஞ்சித்தனார்  
 (C) நான்மணிக்கடிகை, விளம்பி நாகனார்  
 (D) திருவருட்பா, இராமலிங்க அடிகளார்

### PART C

31. If your weight on earth is 60 kg, what will be your weight on the moon?

- (A) 5 Kg (B) 10 Kg  
(C) 15 Kg (D) 20 Kg

பூமியில் உன்னுடைய எடை 60 கிலோவாக இருந்தால், நிலவில் உன்னுடைய எடை என்ன?

- (A) 5 கிலோகிராம் (B) 10 கிலோகிராம்  
(C) 15 கிலோகிராம் (D) 20 கிலோகிராம்

32. Sericulture is

- (A) Silk cultivation (B) Fish cultivation  
(C) Fruits cultivation (D) Milk production

செரிகல்சர் என்பது

- (A) பட்டு வளர்ப்பு (B) மீன் வளர்ப்பு  
(C) பழ வளர்ப்பு (D) பால் உற்பத்தி

33. When did the Constitution of India come into effect?

- (A) 26.01.1950 (B) 15.08.1947  
(C) 26.01.1947 (D) 15.11.1950

இந்திய அரசியலமைப்பு சட்டம் எப்போது அமலுக்கு வந்தது?

- (A) 26.01.1950 (B) 15.08.1947  
(C) 26.01.1947 (D) 15.11.1950

34. Who among the following appoints the Governor of the states in India?

- (A) Prime Minister (B) Parliament  
(C) President (D) Rajya Sabha Chairman

கீழ்க்கண்டவர்களில் யார் இந்தியாவில் உள்ள மாநிலங்களில் ஆளுநரை நியமிக்கிறார்?

- (A) பிரதம மந்திரி (B) பாராளுமன்றம்  
(C) குடியரசு தலைவர் (D) ராஜ்யசபா தலைவர்



35. Who is the current RBI Governor?

- (A) Shaktikanta Das (B) Deshmukh  
(C) Raghuram (D) Urjit Patel

ரிசர்வ் வங்கியின் தற்போதைய கவர்னர் யார்?

- (A) சக்தி காண்டா தாஸ் (B) தேஸ்முக்  
(C) ரகுராம் (D) உர்ஜிட் பட்டேல்

36. Who is the first recipient of Nobel Prize for literature in Asia?

- (A) Rabindranath Tagore  
(B) Sarojini Naidu  
(C) Satyajit Ray  
(D) Raman

ஆசியாவில் இலக்கியத்திற்காக முதன்முதலில் நோபல் பரிசு பெற்றவர் யார்?

- (A) ரவிந்திரநாத் தாகூர்  
(B) சரோஜினி நாயுடு  
(C) சத்தியஜித் ராய்  
(D) ராமன்

37. When was the Non Co-operation Movement launched?

- (A) 1919 (B) 1920  
(C) 1922 (D) 1942

எப்போது ஒத்துழையாமை இயக்கம் ஆரம்பிக்கப்பட்டது?

- (A) 1919 (B) 1920  
(C) 1922 (D) 1942

38. A man is walking at a speed of 10 kmph. After every km, he takes a rest for 5 minutes. How much time will he take to cover a distance of 5 km?

- (A) 60 minutes (B) 50 minutes  
(C) 40 minutes (D) 70 minutes

ஒரு மணிக்கு 10 கிலோமீட்டர் வேகத்தில் ஒரு நபர் நடக்கின்றார். ஒவ்வொரு கிலோமீட்டர் கடந்தபின்னர் அவர் 5 நிமிடம் ஓய்வு எடுக்கிறார். 5 கிலோமீட்டர் தூரம் கடக்க அவர் எவ்வளவு நேரம் எடுத்துக்கொள்வார்?

- (A) 60 நிமிடம் (B) 50 நிமிடம்  
(C) 40 நிமிடம் (D) 70 நிமிடம்

39. Jitu Rai is associated with which sports?

- (A) athletics (B) football  
(C) wrestling (D) shooting

எந்த விளையாட்டுடன் ஜித்தூராய் தொடர்புடையவர்?

- (A) தடகள போட்டி (B) கால்பந்தாட்டம்  
(C) மல்யுத்தம் (D) துப்பாக்கி சுடுதல்

40. Fresh sugarcane contains 84% water. Dried sugarcane contains 28% water. How many kgs of dried sugarcane can be obtained from 90 kg of fresh sugarcane?

- (A) 10 (B) 20  
(C) 35 (D) 72

புதுகரும்பு 84 சதவீத தண்ணீரை கொண்டுள்ளது. உலர்ந்த கரும்பு 28 சதவீத தண்ணீரை கொண்டுள்ளது. 90 கிலோ எடையுள்ள புதுகரும்பிலிருந்து எவ்வளவு கிலோ உலர்ந்த கரும்பை பெற முடியும்?

- (A) 10 (B) 20  
(C) 35 (D) 72

41. Match the following :

- |                 |               |
|-----------------|---------------|
| (a) Hockey      | 1. 7 players  |
| (b) Volleyball  | 2. 5 players  |
| (c) Basket ball | 3. 6 players  |
| (d) Kabadi      | 4. 11 players |

- |     | (a) | (b) | (c) | (d) |
|-----|-----|-----|-----|-----|
| (A) | 1   | 2   | 3   | 4   |
| (B) | 3   | 4   | 2   | 1   |
| (C) | 4   | 3   | 2   | 1   |
| (D) | 2   | 1   | 4   | 3   |

கீழ்க்கண்டவற்றை பொருத்துக :

- |                 |                |
|-----------------|----------------|
| (a) ஹாக்கி      | 1. 7 வீரர்கள்  |
| (b) கைப்பந்து   | 2. 5 வீரர்கள்  |
| (c) கூடைப்பந்து | 3. 6 வீரர்கள்  |
| (d) கபடி        | 4. 11 வீரர்கள் |

- |     | (a) | (b) | (c) | (d) |
|-----|-----|-----|-----|-----|
| (A) | 1   | 2   | 3   | 4   |
| (B) | 3   | 4   | 2   | 1   |
| (C) | 4   | 3   | 2   | 1   |
| (D) | 2   | 1   | 4   | 3   |

42. Who gave the title of Father of Nation to Mahatma Gandhi?

- |                         |                      |
|-------------------------|----------------------|
| (A) Subhas Chandra Bose | (B) Jawaharlal Nehru |
| (C) Vallabhai Patel     | (D) Mountbatten      |

மகாத்மா காந்திக்கு தேசத்தின் தந்தை என்று யார் பட்டம் கொடுத்தார்?

- |                      |                     |
|----------------------|---------------------|
| (A) சுபாஷ்சந்திரபோஸ் | (B) ஜவஹர்லால் நேரு  |
| (C) வல்லபாய் பட்டேல் | (D) மவுண்ட் பேட்டன் |

43. What is unit of temperature in the S.I system?

- (A) centigrade (B) kelvin  
(C) rumen (D) fahrenheit

எஸ்.ஐ. முறையில் உள்ள வெப்பத்தின் அலகு என்ன?

- (A) சென்டிகிரேட் (B) கெல்வின்  
(C) ரூமன் (D) பாரன்ஹீட்

44. Rainfall is decreasing due to

- (A) afforestation (B) industrialization  
(C) global warming (D) pollution

மழை குறைவதற்கான காரணம்?

- (A) காடு வளர்ப்பு (B) தொழில்மயமாதல்  
(C) உலக வெப்பமயமாதல் (D) மாசுபடுதல்

45. A boy could do  $\frac{1}{7}$ th part of some work in 6 days. The number of days he would take to do 0.5 part of the same work is

- (A) 42 days (B) 21 days  
(C) 11 days (D) 6 days

ஒரு சிறுவன் சில வேலையின்  $\frac{1}{7}$  பகுதியை செய்து முடிக்க 6 நாட்கள் ஆகிறது. அதே வேலையை 0.5 பகுதியை அவர் செய்ய எவ்வளவு நாட்கள் ஆகும்?

- (A) 42 நாட்கள் (B) 21 நாட்கள்  
(C) 11 நாட்கள் (D) 6 நாட்கள்

46. A man bought a saree for Rs. 546, after getting a discount of Rs. 104 on its marked price. The percentage of discount given to him was

- (A) 16% (B) 15%  
(C) 18% (D) 20%

ஒரு சேலையில் அதில் குறிப்பிடப்பட்ட விலையிலிருந்து ரூபாய் 104 தள்ளுபடி போக, ஒரு நபர் ரூபாய் 546-க்கு அந்த சேலையை வாங்கினார். அவருக்கு எவ்வளவு சதவீத தள்ளுபடி கொடுக்கப்பட்டது?

- (A) 16% (B) 15%  
(C) 18% (D) 20%

47. Arrange the following in the increasing order of their size :

Karnataka, Kerala, Tamil Nadu, Telangana

- (A) Kerala, Telangana, Tamil Nadu, Karnataka  
(B) Kerala, Tamil Nadu, Telangana, Karnataka  
(C) Kerala, Telangana, Karnataka, Tamil Nadu  
(D) Karnataka, Tamil Nadu, Telangana, Kerala

கீழ்க்கண்டவற்றை அதன் அளவை வைத்து மேல்நோக்கி வரிசைப்படுத்துக.

கர்நாடகா, கேரளா, தமிழ்நாடு, தெலுங்கானா

- (A) கேரளா, தெலுங்கானா, தமிழ்நாடு, கர்நாடகா  
(B) கேரளா, தமிழ்நாடு, தெலுங்கானா, கர்நாடகா  
(C) கேரளா, தெலுங்கானா, கர்நாடகா, தமிழ்நாடு  
(D) கர்நாடகா, தமிழ்நாடு, தெலுங்கானா, கேரளா

48. Which of the following is not a browser?

- (A) android (B) firefox  
(C) chrome (D) safari

கீழ்க்கண்டவற்றில் எது பிரவுசர் இல்லை?

- (A) ஆண்ட்ராய்டு (B) பயர்பாக்ஸ்  
(C) குரோம் (D) சபாரி

49. What is the maximum (sanctioned) strength of Supreme Court including the Chief Justice of India?

- (A) 26 (B) 31  
(C) 34 (D) no limit

உச்ச நீதிமன்ற தலைமை நீதிபதியை உள்ளடக்கி உச்சநீதிமன்ற நீதிபதிகளின் எண்ணிக்கை எவ்வளவு?

- (A) 26 (B) 31  
(C) 34 (D) வரம்பில்லை

50. The \_\_\_\_\_ is considered as the 'network of networks'.

- (A) internet (B) satellite network  
(C) local area network (D) metropolitan area network

நெட்வர்கின் நெட்வர்க் என்பது

- (A) இண்டர்நெட் (B) சேட்டிலைட் நெட்வர்க்  
(C) லோக்கல் ஏரியா நெட்வர்க் (D) மெட்ரோபாலிடன் ஏரியா நெட்வர்க்

## PART D

51. Execute a command as another user in Linux?  
(A) Who (B) Tty  
(C) Chmod (D) Sudo
52. Online content that is not indexed by search engines is called \_\_\_\_\_  
(A) Disconnected web (B) Private documents  
(C) Hidden documents (D) Deep web
53. What is a long-term scheduler?  
(A) It selects which process has to be brought into the ready queue  
(B) It selects which process has to be executed next and allocated CPU  
(C) It selects which process to remove from memory by swapping  
(D) None of these
54. The process of building new classes from existing one is called  
(A) Structure (B) Inheritance  
(C) Polymorphism (D) Template
55. Personal Area Network is a network arranged within an individual person, typically within a range of  
(A) 10 meters (B) 20 meters  
(C) 40 meters (D) 30 meters
56. What do you use the Aux port for?  
(A) Console (B) Terminal editing  
(C) Modem (D) Backup logging

57. \_\_\_\_\_ and \_\_\_\_\_ are the two issues of Requirement Analysis.
- (A) Performance, Design
  - (B) Stakeholder, Developer
  - (C) Functional, Non-Functional
  - (D) None of the mentioned
58. MIME stand for
- (A) Multipurpose Internet Messaging Extension
  - (B) Multipurpose Internet Mail Extension
  - (C) Multipurpose Internet Media Extension
  - (D) Multipurpose Internet Mass Extension
59. The statement that is executed automatically by the system as a side effect of the modification of the database is
- (A) backup
  - (B) assertion
  - (C) recovery
  - (D) trigger
60. When do you stop testing in software development?
- (A) The faults have been fixed
  - (B) All the tests run
  - (C) The time completed
  - (D) The risk is resolved
61. Select the tag which is used to mark a beginning of paragraph
- (A) <TD>
  - (B) <br>
  - (C) <P>
  - (D) <TR>



62. The technology that is not used by Ajax is
- (A) JavaScript
  - (B) XMLHttpRequest
  - (C) Document Object Model
  - (D) Flash
63. Out of the following which one is a Software Testing tool?
- (A) Rational Rose
  - (B) Oracle
  - (C) Win Runner
  - (D) Linux
64. What is the output message displayed when you execute the applet of the following Java program?
- ```
import java.awt.*;
import java.applet.*;

public class myapplet extends Applet
{
public void paint(Graphics g)
{
g.drawString("A Simple Applet", 20, 20);
}
}
```
- (A) A Simple Applet
  - (B) A Simple Applet 20 20
  - (C) Compilation Error
  - (D) Runtime Error

65. Half duplex Ethernet operation is
- (A) Half Duplex Ethernet technology provides a transmit circuit connection wired directly to the receiver circuit at the other end
  - (B) Half duplex transmission between stations is achieved by using point to multipoint Ethernet and Fast Ethernet
  - (C) With Half Duplex transmission logically circuits feed into a single cable creating a situation similar to a one way bridge
  - (D) Half Duplex transmission between stations is achieved using Point to Point Ethernet & Fast Ethernet
66. What does a directed arc or line signify?
- (A) Data Flow
  - (B) Data Process
  - (C) Data Stores
  - (D) None of the above
67. Servlets are used to program which component in a web application?
- (A) client
  - (B) server
  - (C) tomcat
  - (D) applet
68. Which of the following code is used to get an attribute in a HTTP Session object in servlets?
- (A) session.getAttribute(String name)
  - (B) session.alterAttribute(String name)
  - (C) session.updateAttribute(String name)
  - (D) session.setAttribute(String name)

69. Which of the following is true regarding PostgreSQL?
- (A) PostgreSQL is a powerful
  - (B) PostgreSQL is open source
  - (C) PostgreSQL is object-relational database system
  - (D) All of the above
70. Identify the correct syntax for referring the external style sheet?
- (A) `<style src = example.css>`
  - (B) `<style src = "example.css">`
  - (C) `<stylesheet> example.css </stylesheet>`
  - (D) `<link rel="stylesheet" type="text/css" href="example.css">`
71. The incorrect Python declaration is
- (A) `xyzp = 5,000,000`
  - (B) `x y z p = 5000 6000 7000 8000`
  - (C) `x,y,z,p = 5000, 6000, 7000, 8000`
  - (D) `x_y_z_p = 5,000,000`
72. Gutter margin is
- (A) Margin that is added to right margin when printing
  - (B) Margin that is added to the left margin when printing
  - (C) Margin that is added to the outside of the page when printing
  - (D) Margin that is added to the binding side of page when printing
73. \_\_\_\_\_ Supports Web Services Testing
- (A) Selenium
  - (B) SilkTest
  - (C) Postman
  - (D) ALM

74. The following are the features of Content Management System (CMS)  
 (A) Content Creation and Storage (B) Workflow Management  
 (C) Publishing (D) All of the above
75. From the following which is not a web hosting company?  
 (A) Hostgator (B) Blue Host  
 (C) WPX Hosting (D) Facebook
76. What will be the output of the following Java code?

```

class overload
{
    int x;
    double y;
    void add(int a , int b)
    {
        x = a + b;
    }
    void add(double c , double d)
    {
        y = c + d;
    }
    overload()
    {
        this.x = 0;
        this.y = 0;
    }
}
class Overload_methods
{
    public static void main(String args[ ])
    {
        overload obj = new overload();
        int a = 2;
        double b = 3.2;
        obj.add(a, a);
        obj.add(b, b);
        System.out.println(obj.x + " " + obj.y);
    }
}

```

(A) 6 6 (B) 6.4 6.4  
 (C) 6.4 6 (D) 4 6.4

77. Arrange the steps in order to represent the conducting of Wideband Delphi Technique.
- i. Conduct a group discussion
  - ii. Conduct another group discussion
  - iii. Present experts with a problem
  - iv. Collect expert opinion anonymously
  - v. Iterate until consensus is reached
  - vi. Feedback a summary of result to each expert
- (A) i, iii, ii, iv, v, vi                      (B) iii, i, ii, iv, v, vi  
(C) i, ii, iii, iv, vi, v                      (D) iii, i, iv, vi, ii, v
78. The difference between servlets and applets is
- i. Servlets execute on Server; Applets execute on browser
  - ii. Servlets have no GUI; Applet has GUI
  - iii. Servlets creates static web pages; Applets creates dynamic web pages
  - iv. Servlets can handle only a single request; Applet can handle multiple requests
- (A) i, ii, iii are correct                      (B) i, ii are correct  
(C) i, iii are correct                      (D) i, ii, iii, iv are correct
79. Which tag should be used to pass information from JSP to included JSP?
- (A) Using `<%jsp:page>` tag  
(B) Using `<%jsp:param>` tag  
(C) Using `<%jsp:import>` tag  
(D) Using `<%jsp:useBean>` tag



82. Hex Code format of CSS colours :

- (A) This is a shorter form of the six-digit notation.
- (B) In this format, each digit is replicated to arrive at an equivalent six-digit value.
- (C) Each hexadecimal code will be preceded by a pound or hash sign '#'.
- (D) All of the above.

83. Study the following Python program

```
class Std_Name:
```

```
    def __init__(self, Std_firstName, Std_Phn, Std_lastName):
```

```
        self.Std_firstName = Std_firstName
```

```
        self.Std_PhnStd_Phn = Std_Phn
```

```
        self.Std_lastNameStd_lastName = Std_lastName
```

```
Std_firstName = "Wick"
```

```
name = Std_Name(Std_firstName, 'F', "Bob")
```

```
Std_firstName = "Ann"
```

```
name.lastName = "Nick"
```

```
print(name.Std_firstName, name.Std_lastName)
```

What will be the output of this statement?

- (A) Ann Bob
- (B) Ann Nick
- (C) Wick Bob
- (D) Wick Nick

84. The given Query can be replaced with \_\_\_\_\_

```
SELECT name
FROM instructor1
WHERE salary <= 100000 AND salary >= 90000;
```

- (A) SELECT name  
FROM instructor1  
WHERE salary BETWEEN 100000 AND 90000
- (B) SELECT name  
FROM instructor |  
WHERE salary BETWEEN 90000 AND 100000;
- (C) SELECT name  
FROM instructor1  
WHERE salary BETWEEN 90000 AND 100000;
- (D) SELECT name  
FROM instructor!  
WHERE salary <= 90000 AND salary >=100000;

85. The processes that are residing in main memory and are ready and waiting to execute are kept on a list called:

- (A) job queue
- (B) ready queue
- (C) execution queue
- (D) process queue

86. Which of the following operation is used if we are interested in only certain columns of a table.

- (A) PROJECTION
- (B) SELECTION
- (C) UNION
- (D) JOIN



87. Which of the following statement is true?

- (A) DELETE does not free the space containing the table and TRUNCATE free the space containing the table.
- (B) Both DELETE and TRUNCATE free the space containing the table
- (C) Both DELETE and TRUNCATE does not free the space containing the table
- (D) DELETE free the space containing the table and TRUNCATE does not free the space containing the table

88. DNS Stands for

- (A) Domain Name System
- (B) Dynamic Network Service
- (C) Domain Network Service
- (D) Domain Network System

89. In Java, declaring a class abstract is useful

- (A) To prevent developers from further extending the class
- (B) When it doesn't make sense to have objects of that class
- (C) When default implementations of some methods are not desirable
- (D) To force developers to extend the class not to use its capabilities

90. Which class or interface defines the wait(), notify(), and notifyAll() methods?

- (A) Object
- (B) Class
- (C) Runnable
- (D) Thread

91. Which of the following operation cannot be performed on a Python string?
- (A) Deleting
  - (B) Splitting
  - (C) Adding
  - (D) Reassigning
92. The order in which test levels are performed is
- (A) Unit, integration, acceptance, system
  - (B) Unit, system, integration, acceptance
  - (C) Unit, integration, system, acceptance
  - (D) It depends on the nature of the project
93. The rule that a value of a foreign key must appear as a value of some specific table is called a
- (A) Referential constraint
  - (B) Index
  - (C) Integrity constraint
  - (D) Functional dependency
94. How can you make an email link in html?
- (A) `<mail href +=xxx@y.com>`
  - (B) `<a href = "mailto : xxx@y.com">`
  - (C) `<a href = xxx@y.com>`
  - (D) (B) and (C)
95. Which of the following is not a JSON type?
- (A) date
  - (B) Object
  - (C) Array
  - (D) String

96. Create table student(name varchar, id integer) What type of statement is this?  
(A) DDL (B) DML  
(C) Query (D) SQL
97. What is the size of the host bits in class B of IP address?  
(A) 8 (B) 16  
(C) 64 (D) 32
98. In Java Iterator, has MoreElements() method of Enumeration has been changed to :  
(A) hasNextElement() (B) isNext()  
(C) hasNext() (D) name remains same
99. Which method causes the audio clip to replay continually?  
(A) public void replay()  
(B) public void loop()  
(C) public void continue()  
(D) none of the above
100. What will be the output of following Python code snippet?  
for i in range(0, -2, -1): print(i)  
(A) 0,-1 (B) 0,-1,-1  
(C) -1,-2 (D) 0



107. Which-one of the following statements about normal forms is FALSE?
- (A) BCNF is stricter than 3 NF
  - (B) Lossless, dependency – preserving decomposition into 3 NF is always possible
  - (C) Loss less, dependency – preserving decomposition into BCNF is always possible
  - (D) Any relation with two attributes is BCNF
108. An instance of relational schema R (A, B, C) has distinct values of A, including NULL values. Which one of the following is true?
- (A) Combination of Union and Cartesian product
  - (B) A is not a candidate key
  - (C) A is primary key
  - (D) Both (A) and (C)
109. Assume that an HTML form is designed to purchase the furniture. All the items required are being checked. After selecting the items the payment details are entered and the submit button is pressed. From the following options which one would you prefer to send the data to the server. Assume that all the security is handled.
- (A) Only POST
  - (B) Only GET
  - (C) Either GET or POST
  - (D) Neither GET nor POST
110. A new web browser window can be opened using which method of the window object?
- (A) Createtab()
  - (B) Window.open()
  - (C) Open()
  - (D) All of the above
111. Which statement(S) is/are incorrect?
- (A) Stored procedure may return a value and function must return a value
  - (B) Function has only IN parameter
  - (C) Try and Catch can be used with both stored procedure and function
  - (D) Stored procedure has IN and OUT parameter



117. The types of communication media used to connect different computers of a network are
- (A) Physical wires
  - (B) Wireless media like RF (Radio Frequency) devices
  - (C) Both (A) and (B)
  - (D) None
118. Banker's algorithm is used
- (A) To prevent deadlock
  - (B) To deadlock recovery
  - (C) To solve the deadlock
  - (D) None of these
119. Which of the following is known as the generic class?
- (A) Final class
  - (B) Template class
  - (C) Abstract class
  - (D) Efficient code
120. XML digital signatures provides
- (A) Authentication
  - (B) Authorization
  - (C) Integrity
  - (D) Confidentiality
121. String testing is another name for
- (A) Unit testing
  - (B) Integration testing
  - (C) Manual testing
  - (D) Atomation testing
122. Javascript classes can be initiated using which operator?
- (A) create
  - (B) new
  - (C) instantiate
  - (D) Create.new
123. Which of the following css properties can be used to align an element horizontally & vertically?
- (A) align-items: center; display: block;
  - (B) text-align: center; align-items: center; display: flex;
  - (C) align-items: center: text-align: justify;
  - (D) justify-content: center; align-items: center; display: flex

124. Which of the following protocol the Webservice supports?  
 (A) HTTP (B) HTTPS  
 (C) TCP/IP (D) FTP
125. Python is not a \_\_\_\_\_ language.  
 (A) Extensible (B) Object-Oriented  
 (C) Dynamically typed  (D) Compiled
126. Which of the following ACID property ensures that multiple transactions can occur concurrently without leading to the inconsistency of database state.  
 (A) Atomicity (B) Consistency  
 (C) Isolation (D) Durability
127. Of the following data structures, which has a Last In First Out ordering? In other words, the one that came in last will be the first to be popped  
 (A) Queue  (B) Stack  
 (C) Vector (D) Array List
128. Which of the following selector in CSS is used to select the elements that do not match the selectors?  
 (A) :! selector (B) :not selector  
 (C) :empty selector (D) None of the above
129. A distributed network configuration in which all data/information pass through a central computer is  
 (A) Bus network  (B) Star network  
 (C) Ring network (D) Point-to-point network
130. File \_\_\_\_\_ shrinks the size of a file so it requires less storage space.  
 (A) Compression (B) Defragmenting  
 (C) Synthesizing (D) Scanning



131. A hash function guarantees the integrity of a message. It guarantees that the message has not been
- (A) Replaced
  - (B) Overviewed
  - (C) Changed
  - (D) Violated
132. Which of the following refers to internal software equality?
- (A) Scalability
  - (B) Reusability
  - (C) Reliability
  - (D) Usability
133. Which of the following is an incorrect activity for the configuration management of a software system?
- (A) Change management
  - (B) System management
  - (C) Internship management
  - (D) Version management
134. The term "TCL" stands for
- (A) Ternary Control Language
  - (B) Transmission Control Language
  - (C) Transaction Central Language
  - (D) Transaction Control Language
135. Which of the following is not part of the Test document?
- (A) Test Case
  - (B) Requirements Traceability Matrix [RTM]
  - (C) Test strategy
  - (D) Project Initiation Note [PIN]
136. Which of the following is a configuration item?
- (A) Design & Test specification
  - (B) Source code
  - (C) Log information
  - (D) All of the above

137. How to select the elements with the class name 'example'?

- (A) example
- (B) #example
- (C) .example
- (D) Class example

138. How can you open a link in a new browser window?

- (A) `<a href = "url" target = "new">`
- (B) `<a href = "url" target= "_blank">`
- (C) `<a href = "url".new>`
- (D) `<a href = "url" target ="open">`

139. Which of the following statements is false about event handlers in JavaScript?

- (A) They can be included with input tags
- (B) They can be associated with end of file processing for a database application
- (C) They can be included with the form tag
- (D) They are generally used to call functions when triggered

140. Which character is used in Python to make a single line comment?

- (A) /
- (B) //
- (C) #
- (D) !

141. How many layers are there in the OSI reference model of networking?

- (A) 5
- (B) 6
- (C) 7
- (D) 8

142. Which one of the following is not a maintenance model?
- (A) Waterfall model (B) Reuse-oriented model  
(C) Iterative enhancement model (D) Quick fix model
143. The SQL used by front-end application programs to request data from the DBMS is called
- (A) DML (B) DDL  
(C) VDL (D) SDL
144. We indicate roles in E-R diagrams by labeling the lines that connect \_\_\_\_\_ to \_\_\_\_\_
- (A) Diamond, Diamond (B) Rectangle, Diamond  
(C) Rectangle, Rectangle (D) Diamond, Rectangle
145. Which two features of object-oriented programming are the same?
- (A) Abstraction and Polymorphism features are the same  
(B) Inheritance and Encapsulation features are the same  
(C) Encapsulation and Polymorphism features are the same  
(D) Encapsulation and Abstraction features are the same
146. Writing and maintaining unit tests can be made faster by using
- (A) Parameterized tests (B) Traditional unit tests  
(C) Test invariant conditions (D) Closed methods

147. Which of the following is true of nosql databases?
- (A) They do not support very large amounts of sparse data
  - (B) They do not support distributed database architectures
  - (C) They are not based on the relational model
  - (D) They are geared toward transaction consistency rather than performance
148. Which of the following method is only used to update resource?
- (A) POST
  - (B) PUT
  - (C) PATCH
  - (D) All the above
149. Which html tag allows the user to Zoom in or out in web page?
- (A) User-scalable
  - (B) Min-scalable
  - (C) Max-scalable
  - (D) Initial-scalable
150. MS Excel Lookup syntax
- (A) Lookup Value, Table Array, Column to Return, Approximate Match [True/False]
  - (B) Lookup Value, Lookup Array, Approximate Match [True/False]
  - (C) Lookup Value, Lookup Array, Value to Return Array
  - (D) Lookup Value, Table Array, Column to Return

SPACE FOR ROUGH WORK

**SPACE FOR ROUGH WORK**

SPACE FOR ROUGH WORK

SPACE FOR ROUGH WORK



7. Each question has four responses (A) (B) (C) and (D). You have to select ONLY ONE correct answer in the OMR Answer Sheet. In case you feel that there are more than one correct answers, mark only the answer which you consider the most appropriate. In any case, choose ONLY ONE answer for each question. E.g., If for any question, B is the correct answer, you have to shade as follows:

(A) ● (B) (C) (D)

8. The Question Booklet is printed in four series viz., (A), (B), (C) & (D). The name of the series is printed on the top of the Question Booklet. Mark and shade your correct Question Booklet series (A) / (B) / (C) / (D) carefully in the OMR answer sheet by darkening the appropriate circle without fail. In case of any wrong entry of Booklet series or discrepancy in determining the exact booklet series, then, in all cases your Answer Sheet will be invalidated.
9. You should not remove or tear off any sheet from the Question Booklet. You are not allowed to take the Question Booklet and the Answer Sheet out of the Examination Hall during the time of examination. You are permitted to take the Question Booklet only after the Examination is completed.
10. Do not write anything in the Question Booklet, except in the space provided for Rough work.
11. Failure to comply with any of the above instructions will render you liable for action or penalty as the High Court may decide at its discretion.
12. Using Whitener / Blade / Eraser or any kind of tampering to change the answers on OMR answer sheet will lead to invalidation.
13. PART C is set in both English and Tamil. If there is any inconsistency between English and Tamil version, English version shall prevail.