www.prepp.in

Prepp
Your Personal Exams Guide

089/22

Question Booklet Alpha Code

A

A

Question Booklet Sl. No.

Total Number of Questions : 100	**Time : 90 Minutes**
Maximum Marks : 100	

INSTRUCTIONS TO CANDIDATES

1. The Question Paper will be given in the form of a Question Booklet. There will be four versions of Question Booklets with Question Booklet Alpha Code viz. **A, B, C** & **D**.
2. The Question Booklet Alpha Code will be printed on the top left margin of the facing sheet of the Question Booklet.
3. The Question Booklet Alpha Code allotted to you will be noted in your seating position in the Examination Hall.
4. If you get a Question Booklet where the alpha code does not match to the allotted alpha code in the seating position, please draw the attention of the Invigilator IMMEDIATELY.
5. The Question Booklet Serial Number is printed on the top right margin of the facing sheet. If your Question Booklet is un-numbered, please get it replaced by new Question Booklet with same alpha code.
6. The Question Booklet will be sealed at the middle of the right margin. Candidate should not open the Question Booklet, until the indication is given to start answering.
7. Immediately after the commencement of the examination, the candidate should check that the Question Booklet supplied to him/her contains all the 100 questions in serial order. The Question Booklet does not have unprinted or torn or missing pages and if so he/she should bring it to the notice of the Invigilator and get it replaced by a complete booklet with same alpha code. This is most important.
8. A blank sheet of paper is attached to the Question Booklet. This may be used for rough work.
9. **Please read carefully all the instructions on the reverse of the Answer Sheet before marking your answers.**
10. Each question is provided with four choices **(A), (B), (C)** and **(D)** having one correct answer. Choose the correct answer and darken the bubble corresponding to the question number using Blue or Black Ball Point Pen in the OMR Answer Sheet.
11. **Each correct answer carries 1 mark and for each wrong answer 1/3 mark will be deducted. No negative mark for unattended questions.**
12. No candidate will be allowed to leave the examination hall till the end of the session and without handing over his/her Answer Sheet to the Invigilator. Candidates should ensure that the Invigilator has verified all the entries in the Register Number Coding Sheet and that the Invigilator has affixed his/her signature in the space provided.
13. Strict compliance of instructions is essential. Any malpractice or attempt to commit any kind of malpractice in the Examination will result in the disqualification of the candidate.

A

Your Personal Exams Guide

089/22

Your Personal Exam Guide

1. Which of the following is the work of Vallathol Narayana Menon ?
   A) Badhira Vilapam
   B) Duravastha
   C) Karuna
   D) Chitrasala

2. Which one of the following is wrongly matched ?
   A) Kumaranasan – Prarodanam
   B) Ulloor S. Parameswara Iyer – Vrithamanjari
   C) A. R. Raja Raja Varma – Bhashabhooshanam
   D) G. Sankara Kurup – Pathikante Pattu

3. Which of the following is correctly matched ?
   A) K. P. Kesava Menon – Malayala Rajyam
   B) C. V. Kunhiraman – Malayala Manorama
   C) Kandathil Varghese Mappila – Kerala Kaumudi
   D) C. P. Achutha Menon – Vidya Vinodini

4. Who among the following is the author of 'Pattabakki' ?
   A) M. P. Bhattathirippad
   B) V. T. Bhattathirippad
   C) K. Damodaran
   D) E. V. Krishna Pillai

5. Which is the correct chronological order of the following events ?
   i. Channar Agitation
   ii. Temple Entry Proclamation
   iii. Vaikom Satyagraha
   iv. Guruvayur Satyagraha
   A) i, iii, iv, ii
   B) i, ii, iii, iv
   C) i, iv, ii, iii
   D) iv, i, ii, iii

6. Consider following statements :
   i. The progressive intellectuals like Kesari Balakrishna Pillai had supported the Abstention Movement.
   ii. The Abstention Movement of 1932 was started in Kochi.
   iii. The Abstention Movement stood for achieving Responsible Government in Travancore.
   iv. The leaders of Abstention Movement and others jointly formed the Travancore State Congress.

   Which of the statements given above is/are correct ?
   A) i and ii
   B) i and iii
   C) i, iii, iv
   D) ii and iv

7. Identify the wrongly matched pair :
   A) T. K. Madhavan – Sivayogavilasam
   B) C. Krishnan – Mitavadi
   C) Brahmananda Sivayogi – Mokshapradeepam
   D) Kesavan Asan – Sujananandini

8. Which one of the following statements is not correct ?
   A) Basel Evangelical Mission (BEM) took the initiative of Spreading English Education in Travancore.
   B) Rev. Dawson started a school at Mattanchery in Kochi.
   C) Rajya Samacharam and Paschimodayam were published from Thalassery by Herman Gundert.
   D) The London Mission Society took the initiative of Spreading Western Education in Travancore in the beginning of the nineteenth century.

9. The book 'Kerala Simham' is written by
   A) C. V. Raman Pillai
   B) P. Kesavadev
   C) K. M. Panikkar
   D) Appu Nedungadi

10. The slogan 'American Model Arabikadalil' is related to
   A) Kayyur Revolt
   B) Nivarthana Agitation
   C) Attingal Revolt
   D) Punnapra Vayalar Struggle

11. Consider following statements :
   i. The idea of an Indian Constituent Assembly was put forward by M. N. Roy in the Newspaper 'Indian Patriot'.
   ii. The Cripps Mission was appointed in 1946.
   iii. In 1934, the Indian National Congress officially demanded for a Constituent Assembly.
   iv. The Constituent Assembly was set up as per the recommendation of the Cabinet Mission.

   Which of the statements given above is/are correct ?
   A) i, ii, iv
   B) i, iii, iv
   C) iv, ii
   D) iii, iv

12. Which of the following statements is/are correct with reference to the Preamble of Indian Constitution ?
    i. Preamble is the Soul of the Constitution.
    ii. Preamble provides a key to understanding and interpretation of the Constitution.
    iii. Preamble speaks about the ideal and philosophy of the Constitution.
    iv. The Preamble contains the fundamental principles.
    A) Only ii and iii
    B) Only i and iv
    C) Only i and iii
    D) All of the above (i, ii, iii and iv)

13. Which one of the following is not a common feature of federalism in U.S.A. and India ?
    A) Distribution of powers between the Union and the States
    B) The existence of the Supreme Court
    C) Two sets of Judicial Organisations
    D) Written Constitution

14. Right to Education has been placed in the Indian Constitution under
    A) 95th Amendment Act
    B) 86th Amendment Act
    C) 73rd Amendment Act
    D) 85th Amendment Act

15. Which Article of the Indian Constitution deals with the Fundamental Duties of the citizen ?
    A) Article 51 A
    B) Article 42
    C) Article 14
    D) Article 21 A

16. Which one of the following is not a member of the QUAD group ?
    A) France
    B) India
    C) Japan
    D) U.S.A.

17. Which Five Year Plan linked ICDS (Integrated Child Development Services) to Anganavadi Centres ?
    A) Tenth Five Year Plan
    B) Fifth Five Year Plan
    C) Second Five Year Plan
    D) Sixth Five Year Plan

18. Who is the 29th Chief of the Indian Army ?
    A) M. M. Naravane
    B) R. Harikumar
    C) Manoj Pande
    D) V. R. Chaudhari

19. Venue of the 14th BRICS Summit 2022
    A) Tokyo
    B) Paris
    C) New York
    D) Beijing

20. The first woman cricketer to appear in six cricket world cups
    A) Harman Preet Kaur
    B) Mithali Raj
    C) Smrithi Mandana
    D) Jhulan Goswami

21. 88-108 MHz frequency range is used for transmitting
    A) TV signals
    B) AM short wave
    C) FM
    D) Microwave

22. Line-of-sight communication uses
    A) Ground wave
    B) Sky wave
    C) Space wave
    D) Surface wave

23. 100% modulation is produced in AM when
    A) Carrier amplitude equal to signal amplitude
    B) Carrier amplitude exceeds signal amplitude
    C) Carrier frequency equal to signal frequency
    D) Carrier frequency exceeds signal frequency

24. In superheterodyne broadcast receiver the frequency of local oscillator is
    A) Higher than the incoming signal
    B) Lower than the incoming signal
    C) Equal to the incoming signal
    D) None of these

25. In frequency modulation
    A) Amplitude of the carrier remains same
    B) Frequency of the carrier varies in accordance with the amplitude of the modulating signal
    C) The no. of sidebands are infinite
    D) All of the above

26. In AM transmission the frequency which is not transmitted is
    A) Upper sideband
    B) Lower sideband
    C) Carrier frequency
    D) Audio frequency

27. Pre-emphasis circuit is placed
    A) After modulation circuit
    B) Before modulation circuit
    C) Before deflection circuit
    D) After deflection circuit

28. Demodulation occurs in
    A) Transmitting antenna
    B) Transmitter
    C) Radio receiver
    D) None of these

29. In FM the output noise can be further decreased by
    A) Decreasing frequency deviation
    B) Increasing frequency deviation
    C) Keeping deviation constant
    D) None of these

30. In a television the aspect ratio is defined as
    A) The ratio of raster width to height
    B) The ratio of raster height to width
    C) The ratio of horizontal scanning frequency to vertical scanning frequency
    D) None of these

31. Most commonly used antenna type with TV receiver is
    A) Yagi antenna
    B) Rhombic antenna
    C) Loop antenna
    D) V antenna

32. In case of Indian TV system the difference between video IF and sound IF is
    A) 4.5 MHz
    B) 5.5 MHz
    C) 6 MHz
    D) 6.5 MHz

33. In television video transmitter the type of amplitude modulation used is
    A) DSB
    B) SSB
    C) VSB
    D) Suppressed carrier DSB

34. The Shadow mask in colour picture tube is used to
    A) Reduce X-ray radiation
    B) Ensure that each primary colour beam hits only its own dots
    C) Increases screen brightness
    D) None of the above

35. The colour TV system adopted in India is
    A) PAL system
    B) NTSC
    C) SECAM
    D) None of these

36. Balun in a TV receiver is located
    A) At AGC stage
    B) Between feeder and receiver
    C) At antenna
    D) Between RF stage and mixer

37. In colour TV receiver colour killer circuit
    A) Prevents colour over loading
    B) Ensuring separation of colours
    C) Cuts off the Chroma stage during monochrome reception
    D) Cuts off reception during back porch

38. Interlacing is used in TV frames to
    A) Ensure scanning of all lines
    B) Avoid flicker
    C) Produce illusion of motion
    D) None of the above

39. In RGB colour model used in TV, complementary colour of green is
    A) Yellow
    B) Red
    C) Cyan
    D) Magenta

40. A degaussing coil in colour television is used for
    A) Demagnetising transformer core
    B) Demagnetising colour picture tube
    C) Rotating directional antenna
    D) Trap circuit

41. Which of the phenomenon caused, when Radio waves travel in two or more paths during propagation and produce slowly-changing phase differences between signals at the receiving end
    A) Fading
    B) Absorption
    C) Doppler shift
    D) Diffraction

42. The region between the far end of ground waves received to the nearest point where the sky waves returns to earth is called as
    A) Angle of radiation
    B) Skip distance
    C) Skip zone
    D) Multiple skip

43. The mechanism that causes the electromagnetic waves to return back to earth by anyone of layers of ionosphere is
    A) Only Reflection
    B) Only Refraction
    C) Only Diffraction
    D) None of the above

44. 60 percentage of modulation is given to the carrier of an AM signal that has power of 1000 watts. Calculate the power in lower sideband.
    A) 600 watts
    B) 180 watts
    C) 90 watts
    D) 320 watts

45. The major advantage of frequency modulation over amplitude modulation is
    A) Small frequency deviation
    B) Higher carrier frequency
    C) Smaller bandwidth
    D) Reception is less noisy

46. Phase locked loop can be used as
    A) AM demodulator
    B) FM demodulator
    C) AM receiver
    D) FM receiver

47. Calculate the dissipated power of a 91% efficient antenna if the transmitted power is 15.4 W.
A) 1.83 W B) 1.38 W C) 1.54 W D) 1.43 W

48. Due to smaller dimensions of helix compared to wavelength which mode of radiations occur in Helical antenna ?
A) Elliptical B) Axial C) Normal D) Circular

49. An antenna has 40 Ω antenna resistance and 60 Ω radiation resistance. Calculate the efficiency of antenna.
A) 30% B) 60% C) 40% D) 50%

50. A pulse amplitude modulated signal can be detected by using
A) An ADC B) Low pass filter C) High pass filter D) Band pass filter

51. Under which of the following condition aliasing takes place ?
A) Sampling signal frequency less than Nyquist rate
B) Sampling signal frequency more than Nyquist rate
C) Sampling signal frequency equal to Nyquist rate
D) Sampling signal frequency at a rate which is twice the Nyquist rate

52. If the synchronization between the transmitter and receiver falls which of the following pulse systems would be affected ?
A) PAM B) PWM
C) PPM D) None of these

53. If the radius of the split cell is 50% of the radius of the original cell, the coverage area of the split cell is _____ the coverage area of the original cell.
A) Equal to B) One half of
C) One fourth of D) One tenth of

54. Which among the following is the decentralized hand-off protocol and distributes the hand-off decision process ?
A) Network controlled hand off B) Mobile assisted hand off
C) Soft hand off D) Mobile controlled hand off

55. The output of the vertical amplifier applied to the yoke in a TV receiver consists of
A) Direct current B) Amplified vertical sync pulse
C) A saw tooth voltage D) A saw tooth current

56. Which among the following optical devices allows light to pass through them in only one direction ?
    A) Optical circulator
    B) Optical splitter
    C) Optical isolator
    D) Optical couplers

57. In voltage source inverters, the amplitude of the output voltage is
    A) Independent of the load
    B) Dependent on the load
    C) Dependent only on loads
    D) None of the above

58. What is the measured unit of UPS output rating ?
    A) Voltage
    B) Ampere
    C) Volt ampere
    D) Farad

59. Which among the following is the application of ICT for delivering government services to citizens with quality and transparency ?
    A) E-Business
    B) E-Administration
    C) E-Governance
    D) E-Marketing

60. Name the authority competent to issue license to possess wireless telegraphy apparatus in India.
    A) Telegraph authority constituted under Indian Telegraph Act, 1885
    B) Telegraph authority constituted under Indian Telegraph Act, 1934
    C) Telegraph authority constituted under Indian Telegraph Act, 1972
    D) None of the above

61. If two lamps of 100 w and 40 w are connected in parallel across a 220 volt ac supply
    A) 100 w lamp will give less light
    B) 40 w lamp will give less light
    C) 100 w lamp gives more light
    D) 40 w lamp gives more light

62. During continuity test, a dead short in an installation indicated in a meggar by _____ reading.
    A) zero reading
    B) 1 megaohm
    C) infinity megaohm
    D) 10 megaohm

63. How many free electrons will move through a conductor for one ampere current in one second ?
A) 6.64×10^{16} B) 6.64×10^{18}
C) 6.24×10^{18} D) 6.34×10^{18}

64. The power dissipation in a pure inductor is
A) zero B) unity
C) infinity D) none of these

65. If a choke is not connected to an a.c. tube circuit then the tube is
A) will continue to glow
B) will get fused
C) will not glow
D) will glow intermittently

66. At very high frequencies, the parallel RL circuit behalves as
1. a pure capacitive circuit
2. a pure resistive circuit
3. a pure RL circuit
4. a pure inductive circuit

A) both 1 and 2 B) both 2 and 4
C) 4 only D) 2 only

67. In delta connected load, if one resistor is removed the power will become
A) one-third B) one-fourth
C) three-fourth D) two-third

68. The form factor is the ratio of
A) peak value to r.m.s. value
B) r.m.s. value to peak value
C) r.m.s. value to average value
D) peak value to average value

69. Low retentivity materials are suitable for making
A) weak magnet
B) strong magnet
C) permanent magnet
D) temporary magnet

70. The relative permeability of a magnetic material depends on the
    1. flux
    2. type of material
    3. type of magnetizing force
    4. retentivity.

    A) 2 only
    B) 1 and 2 only
    C) 4 and 1 only
    D) 3 only

71. A material slightly repelled by a magnet are called
    A) ferromagnetic material
    B) insulating material
    C) paramagnetic material
    D) diamagnetic material

72. The process of magnetizing steel is difficult because
    A) it corrodes easily
    B) it has low permeability
    C) it has low specific gravity
    D) it has high conductivity

73. The transformer oil used in a transformer provides
    1. cooling and insulation
    2. insulation and conduction
    3. cooling and lubrication
    4. insulation and cooling

    A) both 1 and 3
    B) both 1 and 4
    C) both 3 and 2
    D) both 1 and 2

74. Which of the following is incorrect ?
    1. Meggar – for checking insulation resistance
    2. Lux meter – measure the amount of amplitude in a work space
    3. Clamp meter – resistance
    4. Tachometer – revolution per minute

    A) both 1 and 2
    B) both 4 and 1
    C) both 3 and 4
    D) both 2 and 3

75. Lead sheath wiring should not be installed near alkaline natured places
    A) statement is correct
    B) statement is incorrect
    C) statement is correct or not correct
    D) none of these

76. The winding used for neutralizing the cross magnetising effect in dc generator is
A) lap winding
B) wave winding
C) compensating winding
D) basket winding

77. The pole flux of a dc generator reduced due to
A) magnetizing effect of armature reaction
B) cross magnetising effect of armature reaction
C) demagnetizing effect of armature reaction
D) residual magnetism of pole shoe

78. The power factor of a squirrel cage induction motor is
A) low at heavy load only
B) low at light load only
C) high at low load only
D) high at high load only

79. For the measurement of slip in 3 phase induction motor by stroboscopic method the no. of white and black segment is
A) both are equal
B) white segment is more than black segment
C) black segment is more than white segment
D) no important for black segments

80. The causes for producing sparking at the brushes in a d.c. machine is
1. open coil in the armature
2. defective pole shoe
3. incorrect brush spring pressure
4. defective interpoles.
A) 1, 2, 3 are correct
B) 1, 3, 4 are correct
C) 2, 3, 4 are correct
D) 4, 2, 1 are correct

81. Second generation computers are made of
A) VLSI
B) Vacuum tubes
C) Transistors
D) Microprocessors

82. Choose the odd one out.
A) Super computer
B) Digital computer
C) Mainframe computer
D) Micro computer

83. A register that keeps track of next instruction to be executed
A) Accumulator
B) Instruction register
C) Data register
D) Program counter

84. Which of the following is used to scan the document containing text ?
A) Optical character recognition
B) Bar code reader
C) Joysticks
D) Magnetic-ink character recognition

85. An Enhanced Graphics Adapter display has a resolution of _____ pixels.
A) 320 × 320
B) 640 × 350
C) 824 × 680
D) 1024 × 768

86. LCD stands for
A) Liquid Colour Display
B) Lithium Crystal Display
C) Light Colour Display
D) Liquid Crystal Display

87. Printer which follow CMYK colour process
A) Ink-jet printer
B) Laser printer
C) Thermal printer
D) Dot-matrix printer

88. Fastest memory in computer system
A) Hard disk
B) Cache
C) ROM
D) RAM

89. Which of the following is a type of optical storage ?
A) Floppy disk
B) Hard disk
C) Pen drive
D) DVD

90. Latest intel core processor
A) Core i15
B) Core i9
C) Core i7
D) Core i3

91. Core of Linux operating system is
A) Kernel
B) Shell
C) Command
D) Application program

92. Which of these is not an operating system ?
A) Windows
B) Linux
C) Pascal
D) Unix

93. Which of the following is not an application in MS-Office ?
A) Access
B) Word
C) PowerPoint
D) DOS

94. Combine name and address with standard document is called
A) Mail merge
B) DBMS
C) Document formatting
D) Form letters

95. Shortcut key to select entire document
A) Ctrl + N
B) Ctrl + S
C) Ctrl + A
D) Ctrl + C

96. DHCP Server provides _____ to the client.
A) MAC address
B) IP address
C) DNS
D) url

97. Which of the protocol used in Transport layer of TCP/IP model ?
A) HTTP
B) SMTP
C) UDP
D) IP

98. Hardware address is known as
A) Physical address
B) Logical address
C) IP address
D) Address Resolution Protocol

99. Which of the following allows user to view a webpage ?
A) Compiler
B) Operating System
C) Interpreter
D) Internet Browser

100. Domain name converted into IP address with the help of
A) URL
B) UDP
C) DNS
D) HTTP

Space for Rough Work

Prepp Your Personal Exam Guide