



सार्वजनिक आरोग्य विभाग परिक्षा
महाराष्ट्र शासन
प्रश्नपुस्तिका



Test Booklet No.: 03000529

प्रश्नपुस्तिका क्रमांक

Test Booklet Code

A

Roll Number: 1180320173

Answer sheet No.: 500529

Post Code: 03 \ Laboratory Scientific Officer

Total Questions: 100

Total Marks: 200

Time: 2 Hours

Nayna Anand Vaso
Name and
Signature of the Candidate

[Signature]
Signature of the Invigilator

IMPORTANT INSTRUCTIONS

महत्वाच्या सूचना

1. The test is of 2 hours duration and Questions Booklet contains 100 questions. Each question carries 02 mark. For each correct response, the candidate will get 02 mark.	१. परिक्षेसाठी २ तासांची वेळ आहे. प्रश्न पुस्तिकेमध्ये १०० प्रश्न आहेत. प्रत्येक प्रश्नासाठी दोन गुण आहे. प्रत्येक मधुकर उत्तरास दोन गुण मिळेल.
2. Use Blue/Black Ball point Pen only for writing particulars on this page or marking responses.	२. या पानावर तपशील लिहिण्यासाठी अथवा चिन्हांकित करण्यासाठी निळा/काळा बॉलपॉइंट पेन वापरा.
3. Rough work is to be done on the space provided for this purpose in the Questions Booklet only.	३. कच्चे काम करावयाचे असल्यास त्यासाठी याच प्रश्न पुस्तिकेमध्ये उपलब्ध केलेल्या स्वतंत्र जागेचा उपयोग करावा.
4. On completion of the test, the candidate must handover the Answer Sheet to the invigilator before leaving the Examination Hall. The candidates are allowed to take away this Questions Booklet with them after examination is over.	४. परिक्षा पूर्ण झाल्यानंतर उमेदवाराने परिक्षाकेंद्र सोडण्यापूर्वी उत्तर पत्रिका समावेशकार्डे जमा करणे बंधनकारक आहे. मात्र प्रश्नपुस्तिका उमेदवारांना बरोबर वेळीच जाण्याची परवानगी आहे.
5. The candidates should ensure that Answer Sheet is not folded. Do not make any stray marks on the Answer Sheet. Do not write your Roll No. Anywhere else except in the specified space in the Questions Booklet and Answer Sheet.	५. उमेदवाराने उत्तरपत्रिकेच्या घड्या घालू नयेत. उत्तरपत्रिकेवर उत्तराचे गडद केलेले फक्त एकाच वर्तुळ सोडून इतर कोठेही प्रश्नारच्या जागा-वृत्ता करू नयेत. प्रश्नपुस्तिका व उत्तरपत्रिकेवरील निर्दिष्टित केलेल्या ठिकाणीच आपला रोल नंबर लिहावा.
6. Each candidate must show his/her Admit Card/Hall Ticket to invigilator whenever demanded.	६. परीक्षा केंद्रावरील समावेशकारी भागणी केल्यानंतर उमेदवारानी प्रवेशपत्र दाखवावे. (Admit Card/Hall Ticket)
7. No candidate should leave his / her seat without special permission of the invigilator/Supervisor.	७. परीक्षा केंद्रा वरिल समावेशक अथवा परीक्षक यांच्या विशेष परवानगी निलान कोणत्याही उमेदवाराने आपली जागा अथवा परीक्षा केंद्र सोडता येऊन नाही.
8. Use of Electronic/Manual Calculator is prohibited	८. इलेक्ट्रॉनिक/मॅन्युअल कॅल्क्युलेटर यांचा वापर करण्यास सक्त मनाई आहे.
9. The candidates are governed by all Rules and Regulations of the examination with regard to their conduct in the Examination Hall.	९. उमेदवारांनी परिक्षे संबंधी लागू असणा-या सर्व नियमांचे पालन करणे बंधनकारक राहिल. आचारसंहितेचा भंग केल्यास नियमानुसार कारवाई करण्यात येईल.
All cases of unfair means will be dealt with the rules & regulations of this examination.	
10. No part of Booklet and Answer Sheet shall be detached under any circumstances.	१०. परीक्षा पूर्ण होईपर्यंत कोणत्याही परिस्थितीत प्रश्नपत्रिका तसेच उत्तरपत्रिका यांची पाने वेगळी करू नयेत.

- 1) "I'm sure I've met your father."
 A) Verb
 B) Preposition
 C) Pronoun
 D) Interjection
- 2) Make the adjective of the word 'occasion.'
 A) occasioned
 B) accusational
 C) occasional
 D) occasionally
- 3) Choose the correct conjunction:
 She bought a car, _____ she was too young to learn to drive.
 A) if
 B) because
 C) although
 D) if not
- 4) I will sing if he _____
 A) will ask me
 B) asks me
 C) asked me
 D) has asked me
- 5) He said, "Please help me."
 Choose the option with the correct indirect form of the above
 A) He pleased me to help me.
 B) He requested me to help him.
 C) He ordered me about helping.
 D) He said I need help
- 6) Choose appropriate antonym for the word 'Gloomy'
 A) Idle
 B) Wise
 C) Cheerful
 D) Sad
- 7) Choose the correct answer from the following and fill in the blank:
 A doctor who studies and treats mental illness _____
 A) psychiatrist
 B) psychologist
 C) psychoanalyst
 D) psychiatry
- 8) Give the meaning of 'To call it a day'.
 A) To have a good day.
 B) To work all the day.
 C) To have a free day.
 D) To stop doing work of the day.
- 9) Choose the correct meaning of the given phrase or idiom:
 Look into -
 A) to examine thoroughly
 B) to watch
 C) to observe
 D) to follow
- 10) Which of the following word is correctly spell?
 A) administration
 B) convorsation
 C) creatyre
 D) devolop
- 11) Meaning of "Fly by night"
 A) Night journey
 B) A Bird busy in night
 C) Cat's eye
 D) Swindler
- 12) I _____ the apartment all day yesterday.
 A) Clear
 B) Washed out
 C) Cleaned Up
 D) None of these
- 13) Choose the word spelt correctly.
 A) Substantial
 B) Substantial
 C) Substantial
 D) Substendial
- 14) He competed _____ me for the prize.
 A) Off
 B) With
 C) To
 D) Off
- 15) He _____ a very good grade in the examination.
 A) Earned
 B) Given
 C) Received
 D) None of these

73) Which needle gauge corresponds with the smallest needle size:

- A. 18
- B. 20
- C. 21
- D. 22

74) All of the following are "Anti-coagulants" EXCEPT

- A. Sodium Citrate
- B. EDTA
- C. Sodium Fluoride
- D. Potassium Oxalate

75) In ELISA, one of the detector enzymes commonly used is Alkaline Phosphatase because

- A. It is easy to isolate from its source.
- B. It is very stable.
- C. Its catalytic activity is very high.
- D. Its use is very simple.

76) A vacutainer with "Gray" cap is used for blood collection for estimation of

- A. blood sugar level.
- B. blood gas analysis.
- C. serum electrolyte analysis.
- D. serum Alanine Transaminase activity.

77) What is the reference range of serum potassium?

- A. 130 to 140 mEq/L
- B. 15 to 40 mg/dl
- C. 3.5 to 5 mmol/L
- D. 60 to 80 IU.

78) Lipid Profile includes all of the following EXCEPT

- A. Total cholesterol.
- B. LDL.
- C. HDL
- D. LDH

79) GOD - POD or Folin and Wu method is used for estimation of

- A. serum Amylase activity
- B. serum Albumin concentration.
- C. blood glucose concentration
- D. serum Urea concentration

80) Diabetes Mellitus is caused by absolute or relative deficiency of

- A. Insulin
- B. Glucagon
- C. Cortisol.
- D. Aldosterone

81) Foetal Haemoglobin contains

- A. Two Alfa and two Beta chains ($\alpha_2\beta_2$).
- B. Two Alfa and two Delta chains ($\alpha_2\delta_2$).
- C. Two Alfa and two Gamma chains ($\alpha_2\gamma_2$).
- D. Four Epsilon chains (ϵ_4)

82) Uric Acid is the End Product of

- A. Carbohydrate Metabolism.
- B. Lipid Metabolism.
- C. Mineral Metabolism.
- D. Purine Metabolism.

83) The destruction of all micro-organisms including spores is called:

- A. Sanitation
- B. Antisepsis
- C. Sterilization
- D. Disinfection

84) Cells in a hypertonic solution will.

- A. Swell and burst
- B. Dehydrate
- C. Hemolyze
- D. No change



36) A bag contains 7 blue balls and 5 yellow balls. If two balls are selected at random, what is the probability that none is yellow?

- A. $\frac{5}{33}$
- B. $\frac{5}{22}$
- C. $\frac{7}{22}$
- D. $\frac{7}{33}$

37) Damodar is 26 years older than his son. In four years, his age will be twice the age of his son. The present age of his son is:

- A. 16 years
- B. 18 years
- C. 20 years
- D. 22 years

38) Introducing a girl, Niraj said, 'Her mother is the only daughter of my mother-in-law'. How is Niraj related to the girl?

- A. Husband
- B. Brother
- C. Father
- D. Uncle

39) Covid - 19 is caused by _____

- A. Bacteria
- B. Parasite
- C. Virus
- D. Fungus

40) Madhuri, who is facing South turns to her left and walks 15 metres, then she turns to her left and walks 7 metres, then facing west she walks 15 metres. How far is she from her original position?

- A. 7m
- B. 10m
- C. 5m
- D. 8m

41) If Sunday falls on 30th April, what day would be on 31st May?

- A. Saturday
- B. Sunday
- C. Monday
- D. Wednesday

30 April - 28
31 May

42)

6	6	8
5	7	5
4	3	?
120	126	320

$\frac{40}{8} = 320$

- A. 12
- B. 8
- C. 14
- D. 16

43) Deepak has some hens and some goats. If the total number of animal heads is 90 and the total number of animal feet is 248, what is the total number of goats Deepak has?

- A. 32
- B. 36
- C. 34
- D. Cannot be determined

44) In class the average age of 75 students is 7 years. If along with the class teacher, the average is 7.5 years. What is the age of teacher age?

- A. 37.5 years
- B. 45 years
- C. 42 years
- D. 39 years

45) In a factory of 140 machine parts, 5 percent were defective. In a factory of 80 machine parts, 10 percent were defective. For the two factory combined, what percent of the machine parts were defective?

- A. 6.50%
- B. 7%
- C. 7.50%
- D. 8%

Let - A (Laboratory Scientific Officer)



24) अशुद्ध शब्द ओळखा

- A. तथापि
- B. परंतु
- C. आणि
- D. यापैकी नाही

25) दुभत्या गाईच्या लाथा गोड या म्हणीचा अर्थ खालीलपैकी कोणता?

- A. दुभत्या गाईची लाथ लागत नाही.
- B. फायद्यासाठी अपमान सहन करणे.
- C. अडथळे आले तरी प्रयत्न करावा.
- D. दुभत्या गाईच्या लाथा खाणे.

26) 'अर्थ नसणे' या अर्थाचा योग्य वाक्यप्रचार कोणता?

- A. गाशा गुंडाळणे
- B. फुगडी घालणे
- C. वा-यावर सोडणे
- D. राम नसणे

27) 'कृपण' या शब्दाच्या विरुद्धार्थी शब्द ओळखा

- A. उदार
- B. कृतघ्न
- C. गरीब
- D. अपूर्व

28) गटात न बसणारा शब्द ओळखा?

- A. सूत
- B. भ्राता
- C. बंधू
- D. भाऊ

29) रामबाण

- A. अधूक गुणकारी
- B. रामाचा बाण
- C. थोर पुरुष
- D. राजा

30) दिलेल्या शब्दाचा समानार्थी नसलेला शब्द ओळखा. निखिल

- A) सर्व
- B) निर्भीड
- C) पूर्ण
- D) सगळा

31) The correct sequence of communication is

- A. Message Sender Receiver
- B. Message Receiver Sender
- C. Sender Message Receiver
- D. Receiver Sender Message

32) AB, DE, GH, ?, MN

- A. IJ
- B. HI
- C. JK
- D. None

33) Pick the odd one

- A. Bengali
- B. Marathi
- C. English
- D. Kannad

34) In a row of trees, one tree is seventh from either end of the row. How many trees are there in the row?

- A. 8
- B. 13
- C. 14
- D. 11

6 7 0

35) In a class of 45 students, a boy is ranked 20th. When two boys joined, his rank was dropped by one. What is his new rank from the end?

- A. 25th
- B. 26th
- C. 27th
- D. 28th

5



Set - A (Laboratory Scientific Officer)

61) One of the following is ketose sugar

- A. Glucose
- B. Galactose
- C. Ribose
- D. Fructose

62) Among the following, an essential amino acid is

- A. Phenylalanine
- B. Tyrosine
- C. Proline
- D. Hydroxyproline

63) Elevated plasma level of the which of the following protects against atherosclerosis?

- A. Chylomicron
- B. VLDL
- C. HDL
- D. LDL

64) Which of the following is not a polyunsaturated fatty acid?

- A. Linoleic acid
- B. Palmitoleic acid
- C. Linolenic acid
- D. Arachidonic acid

65) Creatine kinase is found in

- A. Myocardium
- B. Brain
- C. Muscles
- D. All of the above

66) Normal range of serum albumin (in gm/dl) is

- A. 2.0-3.6
- B. 1.5-5.0
- C. 3.5-5.5
- D. 6.5-8.5

67) Sterilization condition required for Autoclaving are

- A. 121°C and 15 lbs pressure for 20 minutes
- B. 100°C and 15 lbs pressure for 20 minutes
- C. 121°C and 45 lbs pressure for 20 minutes
- D. 131°C for 2 hours

68) Which of the following is acid fast

- A. Mycobacterium tuberculosis
- B. Nocardia
- C. M. leprae
- D. All of the above

69) Concentration of Hypochlorite solution used in Laboratory is

- A. 10%
- B. 8%
- C. 1%
- D. 0.1%

70) Full Form of PCR is

- A. Polymerase Chain Reaction
- B. Polypeptide Continuous Reaction
- C. Poly Chemical Reaction
- D. Pure Chain Reaction

71) Tri Dot test is used for diagnosis of

- A. HBV infection
- B. Poliomyelitis infection
- C. HIV infection
- D. Dengue infection

72) The ketone bodies include acetoacetic acid, acetone, and

- A. Lactic acid
- B. Beta-hydroxy butyric acid
- C. Oxaloacetic acid
- D. Acetic acid

- 85) A biopsy is:
- A. removal of biological fluid
 - B. The removal of an organ
 - C. A post mortem examination
 - D. Excision of a representative tissue sample

- 86) The liquid portion of blood remaining after a clot has formed is called:
- A. The buffy coat
 - B. Serum
 - C. Plasma
 - D. Lymph

- 87) "Chinese letter" arrangement seen with:
- A. Cl. Tetanus
 - B. Cl. Perfringens
 - C. Bacillus anthracis
 - D. Corynebacterium diphtheria

- 88) "Drumstick" appearance is characteristic feature of the following Clostridium:
- A. Oedematiens
 - B. Septicum
 - C. Tetani
 - D. Welchii

- 89) Serum Sodium and Potassium levels are estimated by using:
- A. Flame Photometer
 - B. Colorimeter
 - C. pH meter
 - D. ELISA Reader

- 90) Hormones are:
- A. chemical messengers secreted in synapses.
 - B. chemical messengers secreted in blood
 - C. chemical messengers secreted in intestine.
 - D. chemical messengers secreted in bile.

- 91) Haem degradation leads to formation of:
- A. Taurocholic acid
 - B. Chenodeoxycholic acid.
 - C. Bilirubin.
 - D. Cystatin C

- 92) The preferred renal function test is:
- A. Blood Urea level.
 - B. Serum Creatinine level.
 - C. Serum Uric Acid level.
 - D. Urine Specific Gravity.

- 93) Blood for an RBC count must be prepared from:
- A. EDTA Blood
 - B. Citrate blood
 - C. Heparinized blood
 - D. Oxalated blood

- 94) Which piece of histology equipment is not temperature dependant:
- A. Wax
 - B. Tissue processor
 - C. Microtome
 - D. Embedding center

- 95) Which test cannot be performed on a serum sample?
- A. Iron
 - B. Vitamin B12
 - C. Total lipids
 - D. Clotting factors

- 96) During blood donation, the removal of blood components is called:
- A. Cytophoresis
 - B. Plasmapheresis
 - C. Apheresis
 - D. Leakophresis

97) Size of red blood cell is :

- A. 10 micro meter
- B. 7 micro meter
- C. 8 micro meter
- D. 2 micro meter

98) The disease cannot be transmitted through transfusion of blood is :

- A. Hepatitis B †
- B. AIDS †
- C. Cancer
- D. Malaria †

99) The normal platelet count in adult is :

- A. 100,000 to 300,000 mm^3
- B. 150,000 to 250,000 mm^3
- C. 150,000 to 450,000 mm^3
- D. 200,000 to 300,000 mm^3

100) One unit of fresh blood raises the Hb% concentration by :

- A. 0.1 gm%
- B. 1 gm%
- C. 2 gm%
- D. 2.2 gm%



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- 46) What is the full form of AD, used with dates?
 A. Anno Domini
 B. Assistant Director
 C. Acknowledgement Due
 D. After Date
- 47) Which of the following planets of our solar system has least mass?
 A. Neptune
 B. Jupiter
 C. Mars
 D. Mercury
- 48) Ozone gas is present in which layer of atmosphere?
 A. Stratosphere
 B. Troposphere
 C. Ionosphere
 D. Mesosphere
- 49) Who built the Khajuraho temples?
 A. Holkars
 B. Scindias
 C. Bundela
 D. Chandela
- 50) At which of the following places is the famous Kailasha Temple located?
 A. Ajanta
 B. Badami
 C. Chittor
 D. Ellora
- 51) Which of the following is NOT a Union Territory?
 A. Goa
 B. Lakshadweep
 C. Dadar and Nagar Haveli
 D. Chandigarh
- 52) How many spokes are there in the Dharma Chakra (Ashok Chakra) depicted on the National Flag of India?
 A. 16
 B. 20
 C. 24
 D. 32
- 53) The headquarter of RBI is situated at:
 A. Delhi
 B. Kolkata
 C. Chennai
 D. Mumbai
- 54) Thar Desert is situated in -
 A. Rajasthan
 B. West Bengal
 C. Tamilnadu
 D. Uttarakhnad
- 55) Which of the following is the highest mountain peak in Maharashtra?
 A. Taramati
 B. Anjaneri
 C. Salher
 D. Kalsubai
- 56) National Rural Health Mission (NRHM) was launched in the year:
 A. 2003
 B. 2004
 C. 2005
 D. 2006
- 57) Who was called the 'Iron Man of India'?
 A. Sardar Vallabhbhai Patel
 B. Surendranath Bannerjee
 C. Bipin Chandra Pal
 D. Lala Lajpat Rai
- 58) Which sea is to the west of Maharashtra?
 A) Black
 B) Arabian
 C) Labrador
 D) Timor
- 59) Marathi Language Day is Celebrated on
 A) 15th February
 B) 7th February
 C) 20th February
 D) 27th February
- 60) The river Koyna joins the river Krishna at
 A) Satara
 B) Karad
 C) Kolhapur
 D) Mahabaleshwar

16) अधोरेखित शब्दांच्या विभक्तीचा अर्थ ओळखा.

अ) तो घरातून बाहेर पडला.

- A. कर्ता
- B. कर्म
- C. अपादान
- D. संप्रदान

17) 'सूर्य मावळत आहे' - पूर्ण भविष्यकाळ करा.

- A. सूर्य मावळेल.
- B. सूर्य मावळत असेल.
- C. सूर्य मावळलेला असेल
- D. सूर्य मावळला.

18) 'अमुक झाले तर अमुक होईल' असे काल्पनिक विधान करावयाचे असेल तर भूतकाळी आणि भविष्यकाळी कोणत्या अर्थाच्या क्रियापदाची योजना करावी लागते?

- A. आज्ञार्थी
- B. संकेतार्थी
- C. प्रश्नार्थक
- D. यांपैकी नाही

19) तो पेरुचे फळ सावकाश खात आहे, या वाक्यातील क्रियाविशेषण कोणते?

- A. पेरुचे फळ
- B. फळ
- C. सावकाश
- D. खात आहे

20) अधोरेखित शब्दाचा प्रकार ओळखा. तु म्मा माझ्याबरोबर प्रार्थना म्हण.

- A. उभयान्वयी अव्यय -/
- B. शब्दयोगी अव्यय ✓
- C. क्रियाविशेषण
- D. केवलप्रयोगी अव्यय +

21) कर्ता - कर्म - क्रियापद यांच्या परस्परसंबंधाना म्हणतात.

- A. वाक्य
- B. शब्दसमूह
- C. कर्तरी प्रयोग
- D. प्रयोग

22) सावळाच रंग तुझा पावसाळी नभापरी । (अलंकार ओळखा)

- A. श्लेष अलंकार
- B. यमक अलंकार
- C. अतिशयोक्ती अलंकार
- D. उपमा अलंकार

23) लहानपण देगा देवा | मुंगी साखरेचा रवा |
ऐरावत रत्न थोर | त्यासी अंकुशाचा मार ||
वरील कडव्यातील अलंकार ओळखा.

- A. यमक अलंकार
- B. अनुप्रास अलंकार
- C. रूपक अलंकार
- D. दृष्टांत अलंकार