M.Sc in Applied Microbiology (4th)

15P/292/23 Question Booklet No. 1377

(To be filled up by the candidate by blue/ black ball-point pen)

(Use only **blue/black ball-point pen** in the space above and on both sides of the Answer Sheet)

1. Within 10 minutes of the issue of the Question Booklet, check the Question Booklet to ensure that it contains all the pages in correct sequence and that no page/question
Question Booklet bring it to the notice of the Superintendent/Invigilators imm
fresh Question Booklet.
2. Do not bring any loose paper, written or blank, inside the Examination Hall *except the Admit Card without its envelope.*
3. A separate Answer Sheet is given. *It should not be folded or mutilated. A second Answer Sheet shall not be provided. Only the Answer Sheet will be evaluated.*
4. Write your *Roll Number and Serial Number of the Answer Sheet by pen* in the space provided above.
5. **On the front page of the Answer Sheet, write by pen your Roll Number in the space provided at the top, and by darkening the circles at the bottom. Also, wherever applicable, write the Question Booklet Number and the Set Number in appropriate places.**
6. No overwriting is allowed in the entries of Roll No., Question Booklet No. and Set No. (if any) on OMR sheet and also Roll No. and OMR Sheet No. on the Question Booklet.
7. Any change in the aforesaid entries is to be verified by the invigilator, otherwise it will be taken as unfair means.
8. Each question in this Booklet is followed by four alternative answers. *For each question, you are to record the correct option on the Answer Sheet by darkening the appropriate circle* in the corresponding row of the Answer Sheet, by ball-point pen as mentioned in the guidelines given on the first page of the Answer Sheet.
9. For each question, darken only one circle on the Answer Sheet. If you darken more than one circle or darken a circle partially, the answer will be treated as incorrect.
10. *Note that the answer once filled in ink cannot be changed.* If you *do not wish to attempt* a question, leave all the circles in the corresponding row blank (such question will be awarded zero mark).
11. For rough work, use the inner back page of the title cover and the blank page at the end of this Booklet.
12. Deposit *only the OMR Answer Sheet* at the end of the Test.
13. You are not permitted to leave the Examination Hall until the end of the Test.
14. If a candidat
as the Univ
form of unfair means, he/she shall be liable to such punishment and impose on him/her.

उपर्युक्त निर्देश हिन्दी में : [illegible]

(No. of Printed Pages : 28+2

No. of Questions/प्रश्नों की संख्या : 150

Time/समय : 2½ Hours/घण्टे **Full Marks/पूर्णांक :** 450

Note : (1) Attempt as many questions as you can. Each question carries **3** marks. **One mark** will be deducted for each incorrect answer. Zero mark will be awarded for each unattempted question.

अधिकाधिक प्रश्नों को हल करने का प्रयत्न करें। प्रत्येक प्रश्न **3** अंक का है। प्रत्येक गलत उत्तर के लिए एक अंक काटा जाएगा। प्रत्येक अनुत्तरित प्रश्न का प्राप्तांक शून्य होगा।

(2) If more than one alternative answers seem to be approximate to the correct answer, choose the closest one.

यदि एकाधिक वैकल्पिक उत्तर सही उत्तर के निकट प्रतीत हों, तो निकटतम सही उत्तर दें।

1. 5-bromouracil acts as a mutagen by pairing with

(1) adenine (2) guanine (3) cytosine (4) thymine

2. An organism capable of carrying out butanol fermentation is

(1) *Zymomonas* (2) *Clostridium butyricum*

(3) *Clostridium acetobutylicum* (4) *Enterobacter*

5. Live vaccines are available against the followi

(1) Influenza (2) Measles (3) Rabies (4) Polio

6. Antigenic variation is most extensive in

(1) Influenza virus
(2) Smallpox virus
(3) Measles virus
(4) Herpes virus

7. Which of the following is not a DNA virus?

(1) SV40 (2) T4 phage (3) TMV (4) Adenovirus

8. During meiosis, crossing-over mostly occurs during

(1) prophase I (2) prophase II (3) anaphase I (4) Telophase II

9. Human papilloma virus causes which of the following?

(1) Hepatitis
(2) Cervical cancer
(3) AIDS
(4) Oral cancer

(1) haptens (2) carriers (3) antigens (4) antibodies

12. Which of the following has a ds DNA genome?

(1) CaMV (2) CMV (3) Viroid (4) TLCV

13. Ergot disease is caused by

(1) *Claviceps* (2) *Rhizopus* (3) *Puccinia* (4) *Mucor*

14. The PMF drives protons across microbial membranes, and the energy is used to synthesize ATP in a process known as

(1) chemiosmosis (2) photosynthesis

(3) respiration (4) chemolithotrophy

15. All of the following apply to bacterial plasmids, *except*

(1) they are self-replicating loops of DNA

(2) they have 10-50 genes

(3) they are required in bacterial conjugation

(4) they are essential for survival of the organism

(4) the virus fails to replicate in the bacterial cell

17. UV light causes mutation in bacteria by

(1) causing frame-shift

(2) causing inversion

(3) causing dimerization of adjacent thymine residues

(4) causing transition

18. All except the following is true for *Agrobacterium tumefaciens*

(1) it carries the Ti plasmid

(2) it carries oncogenes on its plasmid

(3) it causes crown gall diseaae

(4) it is a Gram-positive bacterium

19. The capsular material produced by bacteria generally consists of

(1) lipids

(2) polysaccharides

(3) fatty acids

(4) nucleic acids

(1) bacteria (2) fungi (3) algae (4) viruses

22. The enzyme that relaxes supercoiling ahead of the replication for ... replication is a

(1) methylase (2) DNA gyrase (3) primase (4) transposase

23. The metal used to recover copper from a solution of copper sulphate is

(1) Fe (2) Hg (3) Ag (4) Mn

24. Hsp70 is a

(1) heat shock protein
(2) produced by heat stressed *E. coli*
(3) helps remove denatured proteins
(4) All of the above

25. Endospore formation in *Bacillus* is triggered by

(1) starvation
(2) desiccation
(3) growth inhibitory temperatures
(4) All of the above

(4) It has an M_r approximately 109 kDa

27. A compound light microscope cannot resolve structures smaller than

(1) 10 µm (2) 5 µm (3) 2 µm (4) 0·2 µm

28. An envelope is acquired by certain viruses when they

(1) enter the host cell nucleus

(2) migrate to the Golgi body

(3) assemble in the cytosol

(4) bud through the host cell membrane

29. HIV forms DNA from its RNA template using the following enzyme

(1) RNA polymerase (2) Primase

(3) Reverse transcriptase (4) Helicase

30. Which of the following are incapable of producing toxins in the body?

(1) *Clostridium tetani*

(2) Human immunodeficiency virus

(3) *Escherichia coli*

(4) *Clostridium botulinum*

32. All of the following represent non-specific [illegible] *except*

(1) IgG production

(2) production of mucus by the lining of the respiratory tract

(3) production of acid in the stomach

(4) phagocytosis by macrophages

33. A visible clumping of particles occurs to the observer in

(1) ELISA

(2) Agglutination test

(3) Precipitation test

(4) Radioimmunoassay

34. Complex I of the electron transport chain is called

(1) succinate/coq oxidoreductase

(2) cytochrome c oxidase

(3) ubiquinone

(4) NADH/co oxidoreductase

35. Antibiotics are largely produced by bacteria during

(1) lag phase

(2) log phase

(3) stationary phase

(4) decline phase

(1) a specific micro-organism to a specific dis

(2) spontaneous generation of micro-organism to organic matter

(3) production of toxins to disease

(4) transmission of sleeping sickness to tsetse flies

38. The number of moles of solute present in one Kg of a solvent is called

(1) normality (2) molality

(3) molarity (4) None of the above

39. The transfer of RNA onto a nitrocellulose membrane and its detection is part of

(1) Southern blotting (2) Northern blotting

(3) Western blotting (4) South-Western blotting

40. *E. coli* chromosome contains approximately

(1) 500 ORFs (2) 2000 ORFs (3) 4000 ORFs (4) 8000 ORFs

41. What is the concentration of H^+ in a solution of 0·1 M NaOH ($Kw = 1 \times 10^{14}$ M^2)?

(1) 10^{-11} M (2) 10^{-12} M (3) 10^{-13} M (4) 10^{-14} M

(4) rod shaped encapsulated cells

43. Phylogenetic tree of bacteria is constructed based on the sequencing of

(1) 18S rRNA
(2) 16S rRNA
(3) DNA
(4) All of the above

44. Pasteurization involves treatment with

(1) low temperature
(2) steaming
(3) high temperature
(4) low and high temperatures

45. Common food poisoning microbes are

(1) *Clostridium* and *Salmonella*
(2) *Clostridium* and *E. coli*
(3) *E. coli* and *Salmonella*
(4) *Clostridium* and *Rhizobium*

46. The Pine seedlings grow best in soils with

(1) VAM
(2) Ectotrophic mycorrhiza
(3) Arbutoid mycorrhiza
(4) Ericoid mycorrhiza

(1) is essentially a saprophyte but can also live as a parasite

(2) always lives as a parasite

(3) never causes disease in a host

(4) can only live as a saprophyte

49. A clear area in the lawn of growing bacterial cells initiated upon bacteriophage infection is called

(1) inhibition zone

(2) plaque

(3) halo

(4) colony forming unit

50. Water

(1) can give up an H^+, becoming OH^-

(2) can accept an H^+, becoming H_3O^+

(3) can form hydrogen bonds

(4) All of the above

51. SARS involves infection of the

(1) gastrointestinal tract

(2) urinary tract

(3) respiratory tract

(4) genitourinary tract

(4) at a site other than the active site in a noncompetitive manner

53. When four different groups are attached to a tetrahedral carbon atom, the structure formed is a

(1) isomer
(2) stereoisomer
(3) simple hydrocarbon
(4) amphipathic molecule

54. Tubulin in Cilia and Flagella are examples of

(1) hormonal proteins
(2) storage proteins
(3) motility proteins
(4) defence proteins

55. Hydrogen bonds cannot form between

(1) water and glucose
(2) water and water
(3) water and phosphate
(4) phosphate and octane

56. If a length of DNA has 45000 base pairs, how many complete turns will a B-DNA take?

(1) 45 (2) 450 (3) 4500 (4) 45000

58. Gram staining is a technique used for differentiating bacterial cells on the basis of their

(1) reproduction
(2) inclusions
(3) cell wall composition
(4) flagellation

59. The *lac* operon is

(1) under the control of catabolite repression
(2) under the control of its own specific negative regulatory system
(3) Both positively and negatively controlled
(4) All are correct

60. Which of the following is normally associated with the production of hybridomas secreting a desired monoclonal antibody?

(1) Blockage of the nucleotide salvage pathway by aminopterin
(2) Mitogen-induced antibody diversity
(3) Myeloma cells producing antibodies
(4) None of the above

(1) 62·9 °C for 30 minutes (2) 71·6 °C for 15 seconds

(3) 71·6 °C for 30 minutes (4) 82 °C for

63. Strictly anaerobic, anoxygenic phototrophs that use the Calvin cycle for CO_2 fixation are

(1) nitrifying bacteria (2) green sulphur bacteria

(3) purple sulphur bacteria (4) sulfur oxidizing bacteria

64. The toxin produced by *Bacillus thuringiensis* is

(1) a lipid with insecticidal properties

(2) a protein with insecticidal properties

(3) a lipid with antiviral properties

(4) a sugar with insecticidal properties

65. One of the major reasons for apoptosis is

(1) lack of polymerase (2) activity of endonucleases

(3) activity of mitochondria (4) reduced food intake

66. Phytoplanktons are dominant in which of the following zones?

(1) Limnetic (2) Profundal (3) Littoral (4) Benthic

(4) safe antibiotics

68. Which of the following compounds would have the highest boiling point?

(1) $CH_3CH_2CH_2CH_3$ (2) CH_3NH_2

(3) CH_3OH (4) CH_2F_2

69. Number of protofilaments in a microtubule is

(1) 5 (2) 10 (3) 12 (4) 13

70. P_{870} reaction centre is associated with the photosynthetic machinery in

(1) cyanobacteria (2) purple bacteria

(3) green bacteria (4) algae

71. Enzymes that catalyze the transfer of a phosphoryl group from ATP to an acceptor are called

(1) kinases (2) hydrolases

(3) mutases (4) oxido-reductases

73. Direct microscopic counts can be used to determine th - in a population of all of the following, *except*

(1) virus (2) bacteria (3) protozoa (4) fungi

74. The polysaccharide used to solidify bacterial growth media is

(1) Gelatin (2) Agar

(3) Starch (4) All of the above

75. Micro-organisms that survive in the absence of moisture do so because

(1) they produce flagella (2) metabolize glucose

(3) have no cell membranes (4) produce spores

76. Two components of the cell membrane in prokaryotes are

(1) DNA and RNA (2) ATP and lipids

(3) lipids and DNA (4) lipids and proteins

77. Organic molecules functioning as coenzymes/cofactors of enzymes are

(1) ubiquinone and cytochromes (2) NAD and FAD

(3) ATP and ADP (4) glucose and pyruvate

(3) polysaccharide (4) lipid

80. Central dogma of genetic information has been modified by the discovery of

(1) reverse transcriptase (2) DNA polymerase

(3) restriction endonuclease (4) RNA polymerase

81. Electron from Cyt C are carried to molecular O_2 in

(1) fermentation (2) aerobic respiration

(3) anaerobic respiration (4) denitrification

82. A sexually transmitted disease showing development of a chancre on the genitals is caused by

(1) *Neisseria gonorrhoeae*

(2) *Treponema pallidium*

(3) Hepatitis B virus

(4) human immunodeficiency virus

(1) *Xanthomonas campestris* (2) *Bacillus thuring*

(3) *Trichoderma harzianum* (4) Nuclear polyhedrosis virus

85. When the F-factor is transferred to a bacterium during conjugation, the receiving bacterium

(1) becomes resistant (2) acquires a capsule

(3) converts to donor bacterium (4) dies

86. Most cases of tetanus are due

(1) deep wounds (2) respiratory droplets

(3) bites of arthropods (4) consuming unpasteurized milk

87. Immunization with Sabin vaccine is to protect against

(1) HIV (2) Tuberculosis (3) Polio (4) Hepatitis

88. The noncoding RNA include

(1) rRNA (2) tRNA

(3) mRNA (4) Both rRNA and tRNA

(1) antibiotic production (2) Sauer [illegible]

(3) alcohol production (4) citric acid production

91. Tetracyclines are antibiotics that prevent the synthesis of

(1) cell wall (2) nucleic acid

(3) protein (4) cytoplasmic membrane

92. Nitrogenase is an enzyme that regulates

(1) nitrogen fixation (2) nitrification

(3) nitrate dissimilation (4) denitrification

93. A mutation in which one amino acid is substituted for another is called

(1) deletion (2) frame-shift mutation

(3) nonsense mutation (4) missense mutation

94. Both DNA and RNA absorb maximally at

(1) 210 nm (2) 280 nm (3) 300 nm (4) 260 nm

(3) competition (4) predation

97. Zoogloeas are

(1) viruses (2) bacteria (3) nematode (4) algae

98. Prochloron is an oxygenic phototroph which contains

(1) *Chlorophyll a* (2) *Chlorophyll b*

(3) Both *Chlorophyll a* and *b* (4) *Phycobilins*

99. In the ocean, spiralling surface currents that concentrate nutrients, wastes and micro-organisms are called

(1) geothermal vents (2) gyres

(3) red tides (4) photic zone

100. What is the mean number of bases per twist in Z-DNA ?

(1) 10 (2) 9 (3) 11 (4) 12

101. Hartig net is associated with, select the most appropriate one

(1) Ectotrophic mycorrhiza (2) Endotrophic mycorrhiza

(3) Ectoendotrophic mycorrhiza (4) Basidiomycetes

(2) 2 (3) 3 (4) 4

104. Which among these is not a mycotoxin?

(1) Aflatoxin (2) Patulin

(3) Ochratoxin (4) δ-toxin

105. Acetic acid, lactic acid, succinic acid, ethanol, CO_2 and H_2 are produced in significant amounts during

(1) mixed-acid fermentation (2) butanediol fermentation

(3) alcoholic fermentation (4) lactic-acid fermentation

106. The number of pathogens that either kill or infect 50% of an experimental group of host is

(1) ID_{50} (2) D value

(3) LD (4) None of the above

107. Which of the following statements is untrue for the endotoxins?

(1) They are secreted by the bacterial cells

(2) They are generally produced by Gram negative bacteria

(3) They are heat stable

(4) They are weakly immunogenic

(1) conjugation
(2) transformation
(3) transduction
(4) All of the above

110. The drug AZT, effective against HIV, is

(1) DNA polymerase
(2) reverse transcriptase inhibitor
(3) RNA polymerase
(4) protease inhibitor

111. Metal that is used as a catalyst in hydrogenation of oils is

(1) Ni (2) Pb (3) Zn (4) Cd

112. Nod factors

(1) help in the formation of nodule
(2) induce root hair curling
(3) trigger plant cell division
(4) do all of the above

(3) capacity of ss DNA to hybridize with a protein sequence present in test specimens

(4) capacity of ds DNA to hybridize with a protein sequence present in test specimens

114. Coliform bacteria are

(1) Gram negative

(2) non-spore forming

(3) rod shaped

(4) All of the above

115. In the *lac* operon, the enzyme permease is coded by

(1) *lac* Z (2) *lac* Y (3) *lac* A (4) *lac* i

116. Regulation of gene expression by attenuation is a feature seen in

(1) *trp* operon (2) *his* operon (3) *ara* operon (4) *lac* operon

117. Class II MHC are expressed on

(1) β-cells

(2) macrophages

(3) dendritic cells

(4) All of the above

the other is

(1) Arginine (2) Aspartic acid

(3) Threonine (4) Tryptophan

120. During DNA replication in bacteria, Single Stranded Binding (SSB) proteins function as

(1) monomers (2) dimers (3) trimers (4) tetramers

121. The first algal virus among the genera cyanobacteria was named

(1) LPP-4 (2) LPP-8 (3) LPP-6 (4) LPP-1

122. RecA, an enzyme required during recombination in bacteria, can also function as a

(1) integrase (2) protease (3) galactosidase (4) exonuclease

123. Tumour formation in cancer is an outcome of

(1) transformation of a cell

(2) immortalization of a cell

(3) transformation and immortalization of a cell

(4) None of the above

125. From a soil sample dilution of 1 : 100, 1 ml is transferred to a flask containing 99 ml of water to give a dilution of

(1) 10^{-2} (2) 10^{-3} (3) 10^{-4} (4) 10^{-5}

126. Pyruvate dehydrogenase in the mitochondrial matrix converts

(1) glucose into glucose-6-phosphate

(2) glyceraldehydes-3-phosphate to pyruvate

(3) reduction of FAD to $FADH_2$

(4) pyruvate into acetyl CoA and CO_2

127. CO_2 is assimilated by phosphoenolpyruvate carboxylase in mesophyll cells forming oxaloacetate in

(1) C_3 pathway (2) photorespiration

(3) fermentation (4) C_4 pathway

128. PS I and PS II absorb light of different wavelength due to

(1) the presence of different soluble electron carriers

(2) different locations in the chloroplast

(3) the proteins associated with each reaction center chlorophyll

(4) different types of reaction center chlorophylls in each photosystem

cutting. The theoretical possibility of this site repeating itself is after how many bases?

(1) 64 (2) 256 (3) 1064 (4) 32

131. Siderophores are produced by bacteria only when the following is in low amounts

(1) Cu (2) Fe (3) Zn (4) Mn

132. A series of operons controlled as a unit constitute a

(1) Regulon (2) Cistron (3) Codon (4) Riboswitch

133. An basic icosahedron is a symmetric structure containing

(1) 18 faces and 8 vertices (2) 20 faces and 12 vertices

(3) 28 faces and 16 vertices (4) 32 faces and 20 vertices

134. A common isotope of iodine used in radioimmunoassay is

(1) ^{100}I (2) ^{125}I (3) ^{150}I (4) ^{175}I

replication is a

(1) methylase (2) DNA gyrase (3) primase

137. Characteristic feature(s) of adaptive immunity is

(1) antigen specificity (2) self-nonself recognition

(3) immunologic memory (4) All of the above

138. The most abundant rare gas in the atmosphere is

(1) Xe (2) Ar (3) He (4) Ne

139. Lipoproteins, glycoproteins, flavoproteins are all examples of

(1) peptides (2) prosthetic groups

(3) conjugated proteins (4) metalloproteins

140. Fungi differ from algae in being

(1) achlorophyllous and autotrophic

(2) chlorophyllous and autotrophic

(3) chlorophyllous and saprophytic

(4) achlorophyllous and heterotrophic

(4) multiplicity of the genetic code

142. The bacteria causing anthrax was discovered by

(1) Koch (2) Pasteur (3) Fleming (4) Jenner

143. Immunologically active region of an immunogen that bind to antigen specific membrane receptors on lymphocytes are

(1) epitopes (2) paratopes (3) CDRs (4) TLRs

144. Reactions involving transfer of electrons are catalyzed by

(1) hydrolases (2) lyases

(3) transferases (4) oxido-reductases

145. The group firmicutes includes bacterial species which are

(1) Gram +ve (2) Gram –ve

(3) acid fast (4) None of the above

(4) None of the above

147. Cyanophages were discovered by

(1) F. W. Twort and F. d'Herelle (2) Safferman and Morris

(3) Robert Koch (4) Benda

148. Number of moles of CO_2 in 16 g of O_2 is

(1) 0·1 mole (2) 0·2 mole (3) 0·4 mole (4) 0·5 mole

149. Two enzymes which are unique to the glyoxalate cycle are

(1) isocitrate lyase and malate synthase

(2) malate dehydrogenase and isocitrate lyase

(3) malate synthase and malate dehydrogenase

(4) malate synthase and citrate synthase

150. CAP, the Catabolic Activator Protein, has a role in the expression of the

(1) *lac* operon (2) *trp* operon (3) *ara* operon (4) *his* operon

***

अभ्यर्थियों के लिए निर्देश

2. परीक्षा भवन में परिचय पत्र सहित प्रवेश-पत्र के अतिरिक्त, लिखा या सादा कोई भी खुला कागज साथ में न लायें।

3. उत्तर-पत्र अलग से दिया गया है। ***इसे न तो मोड़ें और न ही विकृत करें। दूस*** ***पत्र का ही मूल्यांकन किया जायेगा।***

4. अपना *अनुक्रमांक तथा उत्तर-पत्र का क्रमांक प्रथम आवरण-पृष्ठ पर पेन* से निर्धारित स्थान पर लिखें।

5. **उत्तर-पत्र के प्रथम पृष्ठ पर पेन से अपना अनुक्रमांक निर्धारित स्थान पर लिखें तथा नीचे दिये वृत्तों को गाढ़ा कर दें। जहाँ-जहाँ आवश्यक हो वहाँ प्रश्न-पुस्तिका का क्रमांक तथा सेट का नम्बर उचित स्थानों पर लिखें।**

6. ओ० एम० आर० पत्र पर अनुक्रमांक संख्या, प्रश्न-पुस्तिका संख्या व सेट संख्या (यदि कोई हो) तथा प्रश्न-पुस्तिका पर अनुक्रमांक सं० और ओ० एम० आर० पत्र सं० की प्रविष्टियों में उपरिलेखन की अनुमति नहीं है।

7. उपर्युक्त प्रविष्टियों में कोई भी परिवर्तन कक्ष निरीक्षक द्वारा प्रमाणित होना चाहिये अन्यथा यह एक अनुचित साधन का प्रयोग माना जायेगा।

8. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार वैकल्पिक उत्तर दिये गये हैं। ***प्रत्येक प्रश्न के वैकल्पिक उत्तर के लिये आपको उत्तर-पत्र की सम्बन्धित पंक्ति के सामने दिये गये वृत्त को उत्तर-पत्र के प्रथम पृष्ठ पर दिये गये निर्देशों के अनुसार पेन से गाढ़ा करना है।***

9. प्रत्येक प्रश्न के उत्तर के लिये केवल एक ही वृत्त को गाढ़ा करें। एक से अधिक वृत्तों को गाढ़ा करने पर अथवा एक वृत्त को अपूर्ण भरने पर वह उत्तर गलत माना जायेगा।

10. ध्यान दें कि एक बार स्याही द्वारा अंकित उत्तर बदला नहीं जा सकता है। यदि आप किसी प्रश्न का ***उत्तर नहीं देना चाहते हैं,*** तो सम्बन्धित पंक्ति के सामने दिये गये सभी वृत्तों को खाली छोड़ दें। ऐसे प्रश्नों पर शून्य अंक दिये जायेंगे।

11. रफ़ कार्य के लिये प्रश्न-पुस्तिका के मुखपृष्ठ के अन्दर वाले पृष्ठ तथा अंतिम पृष्ठ का प्रयोग करें।

12. परीक्षा के उपरान्त केवल ***ओ०एम०आर० उत्तर-पत्र*** परीक्षा भवन में जमा कर दें।

13. परीक्षा समाप्त होने से पहले परीक्षा भवन से बाहर जाने की अनुमति नहीं होगी।

14. यदि को त साधनों का प्रयोग करता है, तो वह विश्वविद्यालय द्वारा निर्धारित दंड का/की, भागी होगा/होग