Roll. No. .....

O.M.R. Serial No. | | | | | | | | |

| Question Booklet Number |
|---|
| |

# M.Sc. (SEM.-IV) (NEP) (SUPPLE.) EXAMINATION, 2024-25

# MICROBIOLOGY

## ( Advanced Immunology and Immunotechniques )

| Paper Code | | | | | | | |
|---|---|---|---|---|---|---|---|
| L | 0 | 4 | 1 | 0 | 0 | 7 | T |

| Question Booklet Series |
|---|
| A |

**Time : 1 : 30 Hours** **Max. Marks : 75**

**Instructions to the Examinee :**

1. Do not open the booklet unless you are asked to do so.
2. The booklet contains 100 questions. Examinee is required to answer 75 questions in the OMR Answer-Sheet provided and not in the question booklet. All questions carry equal marks.
3. Examine the Booklet and the OMR Answer-Sheet very carefully before you proceed. Faulty question booklet due to missing or duplicate pages/questions or having any other discrepancy should be got immediately replaced.
4. Four alternative answers are mentioned for each question as - A, B, C & D in the booklet. The candidate has to choose the correct / answer and mark the same in the OMR Answer-Sheet as per the direction :

*(Remaining instructions on last page)*

**परीक्षार्थियों के लिए निर्देश :**

1. प्रश्न-पुस्तिका को तब तक न खोलें जब तक आपसे कहा न जाए।
2. प्रश्न-पुस्तिका में 100 प्रश्न हैं। परीक्षार्थी को 75 प्रश्नों को केवल दी गई OMR आन्सर-शीट पर ही हल करना है, प्रश्न-पुस्तिका पर नहीं। सभी प्रश्नों के अंक समान हैं।
3. प्रश्नों के उत्तर अंकित करने से पूर्व प्रश्न-पुस्तिका तथा OMR आन्सर-शीट को सावधानीपूर्वक देख लें। दोषपूर्ण प्रश्न-पुस्तिका जिसमें कुछ भाग छपने से छूट गए हों या प्रश्न एक से अधिक बार छप गए हों या उसमें किसी अन्य प्रकार की कमी हो, उसे तुरन्त बदल लें।
4. प्रश्न-पुस्तिका में प्रत्येक प्रश्न के चार सम्भावित उत्तर- A, B, C एवं D हैं। परीक्षार्थी को उन चारों विकल्पों में से सही उत्तर छाँटना है। उत्तर को OMR उत्तर-पत्रक में सम्बन्धित प्रश्न संख्या में निम्न प्रकार भरना है :

*(शेष निर्देश अन्तिम पृष्ठ पर)*

1. Which type of immunity involves the host producing its own antibodies?
   (A) Passive immunity
   (B) Innate immunity
   (C) Active immunity
   (D) Artificial passive immunity

2. The site of T-cell maturation is:
   (A) Bone marrow
   (B) Liver
   (C) Spleen
   (D) Thymus

3. Which cells are the major producers of antibodies?
   (A) Plasma cells
   (B) Helper T cells
   (C) NK cells
   (D) Neutrophils

4. Which cytokine is primarily antiviral in function?
   (A) IL-1
   (B) IFN-α
   (C) TNF-α
   (D) IL-10

5. Defensins and cathelicidins are examples of:
   (A) Cytokines
   (B) Antimicrobial peptides
   (C) Complement proteins
   (D) Toll-like receptors

6. The "cardinal signs" of acute inflammation were first described by:
   (A) Metchnikoff
   (B) Virchow
   (C) Celsus
   (D) Jenner

7. Why does active immunity provide long-term protection compared to passive immunity?
   (A) It involves repeated antigen exposure
   (B) It generates memory lymphocytes
   (C) It depends on maternal antibodies
   (D) It avoids inflammation

8. In lymph nodes, the paracortex is rich in:
   (A) B cells
   (B) Neutrophils
   (C) Plasma cells
   (D) T cells and dendritic cells

9. Which best explains the role of macrophages in inflammation?
   (A) They provide mechanical barriers
   (B) They release histamine only
   (C) They act as phagocytes and cytokine producers
   (D) They only activate B cells

10. IL-10 primarily functions as:
    (A) A pro-inflammatory mediator
    (B) An anti-inflammatory cytokine
    (C) A chemokine
    (D) A hematopoietic growth factor

11. Cathelicidin LL-37 protects the host by:
    (A) Inducing fever
    (B) Forming pores in microbial membranes
    (C) Neutralizing toxins
    (D) Acting as a complement protein

12. Which feature distinguishes chronic inflammation from acute inflammation?
    (A) Presence of neutrophils
    (B) Resolution within a few days
    (C) Fibrosis and tissue remodelling
    (D) Vasodilation

13. A vaccine introduces inactivated pathogen particles into the body. Which process ensures protective immunity?
    (A) Passive antibody transfer
    (B) Activation of memory B and T cells
    (C) Direct lysis of microbes by complement
    (D) Release of antimicrobial peptides only

14. A patient has a genetic defect in AIRE gene. Which organ will be most affected?
    (A) Bone marrow
    (B) Thymus
    (C) Lymph node
    (D) Spleen

15. A bone marrow transplant restores immune function in a patient. Which concept explains this?
    (A) Hematopoietic stem cell renewal
    (B) Cytokine storm suppression
    (C) Passive immunity
    (D) Antibody neutralization

16. During a bacterial infection, which cytokines would be elevated in the patient's serum?
    (A) IL-4 and IL-10
    (B) IL-1, IL-6, and TNF-$\alpha$
    (C) IFN-$\gamma$ and TGF-$\beta$
    (D) IL-2 and IL-7

17. Which scenario demonstrates the role of defensins?
    (A) Fever induced during viral infection
    (B) NK cell-mediated cytotoxicity
    (C) Antibody-mediated neutralization of toxins
    (D) Disruption of microbial membranes in gut mucosa

18. A patient with splenectomy is at increased risk of infections because:
(A) They lack hematopoiesis
(B) They cannot filter blood-borne antigens
(C) They cannot produce cytokines
(D) They cannot undergo inflammation

19. Compare innate and adaptive immune cells: Which pair correctly matches innate and adaptive immunity?
(A) NK cells – Cytotoxic T cells
(B) Plasma cells – Neutrophils
(C) Helper T cells – Macrophages
(D) B cells – Mast cells

20. In an autoimmune disorder, chronic inflammation persists. Which immunological imbalance best explains this?
(A) Excess pro-inflammatory cytokines and failed resolution
(B) Reduced neutrophil chemotaxis
(C) Excess mast cell degranulation only
(D) Increased maternal antibody transfer

21. If IL-2 signaling is blocked in a patient, what consequence is most likely?
(A) Inability to produce antibodies
(B) Impaired T cell proliferation
(C) Overproduction of antimicrobial peptides
(D) Hyperactivation of NK cells

22. A researcher finds decreased ß-defensin expression in epithelial tissues. Which clinical outcome is most likely?
(A) Increased susceptibility to bacterial and fungal infections
(B) Development of autoimmune diseases
(C) Reduced antibody-mediated responses
(D) Enhanced viral clearance

23. Which of the following best distinguishes primary from secondary lymphoid organs?
(A) Antigen presentation occurs in both
(B) Hematopoiesis occurs only in secondary organs
(C) Maturation of lymphocytes occurs in primary organs
(D) Cytokine production occurs only in secondary organs

24. A patient with uncontrolled TNF-$\alpha$ production develops septic shock. Which step of the immune response is dysregulated?
(A) Adaptive memory formation
(B) Resolution of inflammation
(C) Hematopoietic stem cell renewal
(D) Antigen recognition

25. A biopsy shows fibrosis, lymphocyte infiltration, and angiogenesis. Which immune process explains these findings?
(A) Acute inflammation
(B) Chronic inflammation
(C) Passive immunity
(D) Antibody neutralization

26. Which type of vaccine uses a live but weakened form of a pathogen?
(A) Recombinant vaccine
(B) DNA vaccine
(C) Live attenuated vaccine
(D) Inactivated vaccine

27. Alum is an example of:
(A) Cytokine
(B) Adjuvant
(C) Antibody
(D) Complement protein

28. Which vaccine is produced using recombinant yeast expressing HBsAg?
(A) HPV vaccine
(B) Rabies vaccine
(C) Hepatitis B vaccine
(D) BCG vaccine

29. Which immunization provides immediate but short-lived protection?
(A) Active immunization
(B) Passive immunization
(C) Herd immunity
(D) Therapeutic vaccination

30. WHO initiated the Expanded Programme on Immunization (EPI) in which year?
(A) 1965 (B) 1974
(C) 1985 (D) 1990

31. The first tumor vaccine approved for clinical use was:
(A) BCG vaccine
(B) Sipuleucel-T
(C) HPV vaccine
(D) Recombinant Hepatitis B vaccine

32. Why are adjuvants included in many vaccines?
(A) To provide passive immunity
(B) To enhance immune responses to antigens
(C) To replace cytokines
(D) To neutralize toxins

33. Which best explains the principle of vaccination?
(A) Mimicking infection to induce memory immune responses
(B) Passive transfer of maternal antibodies
(C) Elimination of self-reactive lymphocytes
(D) Blocking cytokine production

34. Edible vaccines are primarily advantageous because:
(A) They eliminate need for boosters
(B) They provide lifelong immunity after one dose
(C) They induce mucosal immunity and are cost-effective
(D) They avoid the need for cold storage and refrigeration only

35. Which cytokine is most commonly used in cancer immunotherapy due to its T-cell proliferative effect?

(A) IL-2

(B) IL-10

(C) IFN-β

(D) TNF-α

36. What is the major limitation of DNA vaccines in humans?

(A) High cost of production

(B) Low immunogenicity without adjuvants or delivery methods

(C) Inability to express antigens in host cells

(D) Risk of integration into host genome in all cases

37. Which best describes the role of WHO in immunization programs?

(A) Producing monoclonal antibodies

(B) Developing recombinant vaccines

(C) Coordinating global vaccine delivery and safety monitoring

(D) Creating national legislation

38. A child bitten by a rabid dog receives rabies immunoglobulin. Which type of immunity does this represent?

(A) Active natural immunity

(B) Passive artificial immunity

(C) Active artificial immunity

(D) Passive natural immunity

39. A new vaccine candidate requires long-term humoral immunity. Which adjuvant mechanism would be most beneficial?

(A) Antigen depots to prolong exposure

(B) Blockade of cytokines

(C) Suppression of dendritic cells

(D) Induction of tolerance

40. A patient receiving CAR-T cell therapy is an example of:

(A) Passive immunotherapy

(B) Active immunotherapy

(C) Recombinant vaccine therapy

(D) Tumor peptide vaccination

41. A population with 95% vaccination coverage is largely protected from measles. Which concept explains this?

(A) Passive immunity

(B) Herd immunity

(C) Cross-reactivity

(D) Antigenic drift

42. A plant-based vaccine expressing cholera toxin subunit is being developed. Which immune response will it primarily stimulate?

(A) Mucosal IgA response

(B) Only systemic IgG response

(C) Passive antibody transfer

(D) Innate neutrophil activation only

43. Which strategy is most appropriate to prevent graft rejection using immunotherapy?
(A) Inducing donor-specific tolerance with peptides
(B) Stimulating NK cells against graft cells
(C) Injecting anti-tumor vaccines
(D) Using checkpoint inhibitors

44. Compare DNA and recombinant vaccines: Which is correct?
(A) DNA vaccines introduce plasmids into host cells, while recombinant vaccines deliver antigen proteins directly.
(B) DNA vaccines are always safer than recombinant vaccines.
(C) Recombinant vaccines cannot induce cellular immunity.
(D) Recombinant vaccines integrate into the host genome.

45. A cancer patient receiving anti-PD-1 antibody therapy experiences restored T-cell function. Which immune checkpoint mechanism has been blocked?
(A) T-cell tolerance induction
(B) T-cell anergy due to self-antigens
(C) Tumor-mediated T-cell inhibition via PD-1/PD-L1 pathway
(D) Direct lysis of T cells by macrophages

46. If a population receives inactivated polio vaccine (IPV) instead of live attenuated (OPV),
which consequence is most likely?
(A) Lower risk of vaccine-derived infections but reduced mucosal immunity
(B) Higher herd immunity and mucosal protection
(C) Increased risk of reversion to virulence
(D) Reduced systemic IgG production

47. A patient with uncontrolled IL-2 administration develops capillary leak syndrome. What does this illustrate?
(A) Cytokines can cause systemic toxicity while activating T cells
(B) IL-2 fails to expand cytotoxic T cells
(C) Cytokines are ineffective in tumor therapy
(D) Passive immunization is safer than active immunization

48. Which feature distinguishes passive immunotherapy (e.g., monoclonal antibodies) from active tumor vaccines?
(A) Passive immunotherapy depends on direct administration of effectors, while active vaccines stimulate patient's immune system.
(B) Both induce long-term immunological memory.
(C) Both require live pathogens for effectiveness.
(D) Active vaccines provide immediate protection, while passive immunotherapy takes weeks.

49. A theranostic nanoparticle carries a tumor-targeting antibody and an imaging tracer. Which advantage does this provide?
(A) Only improved vaccine design
(B) Simultaneous diagnosis and therapy of cancer
(C) Passive immunization against pathogens
(D) Suppression of cytokine storm

50. A biopsy of lymph node after vaccination shows proliferation of memory B cells and plasma cells. Which principle of vaccination does this best illustrate?
(A) Antigenic drift
(B) Clonal selection and immunological memory
(C) Passive immunity
(D) Cytokine storm

51. Which antibody is the first to be produced in a primary immune response?
(A) IgA (B) IgE
(C) IgM (D) IgG

52. Which region of the antibody determines antigen specificity?
(A) Fc region
(B) Hinge region
(C) Variable region of Fab
(D) Constant region of Fab

53. The T cell receptor (TCR) complex is associated with which signalling molecules?
(A) Igα and Igβ
(B) CD19 and CD21
(C) CD3 and ς chains
(D) Fc∈RI and Fcγ RI

54. Regulatory T cells (Tregs) are characterized by expression of:
(A) FOXP3 and CD25
(B) CD28 and CD40L
(C) CD4 and IFN-γ
(D) IL-17 and RORγt

55. Which immunoglobulin isotype is capable of crossing the placenta?
(A) IgA (B) IgG
(C) IgM (D) IgE

56. The idiotype of an antibody refers to:
(A) Species-specific constant regions
(B) Individual genetic variations in constant regions
(C) Antigen-binding determinants unique to the variable region
(D) All antibody classes common to a species

57. Which type of T helper cell is most associated with activation of macrophages?
(A) Th1
(B) Th2
(C) Th17
(D) Tfh

58. Somatic hypermutation in B cells mainly contributes to:
(A) Complement activation
(B) Increased antibody diversity and affinity
(C) Isotype switching from IgM to IgG
(D) Plasma cell differentiation

59. The absence of CD28–CD80/86 interaction during T cell activation will most likely result in:

(A) Stronger T cell proliferation

(B) T cell anergy

(C) Increased cytokine secretion

(D) Enhanced CTL activity

60. Which mechanism prevents self-reactive B cells in the bone marrow?

(A) Positive selection

(B) Peripheral tolerance

(C) Receptor editing

(D) Antigen presentation by dendritic cells

61. A patient with a FOXP3 gene mutation develops severe autoimmune disease early in life.Which mechanism of tolerance is primarily defective?

(A) Central tolerance in thymus

(B) Peripheral tolerance mediated by Tregs

(C) Clonal deletion of B cells

(D) Anergy of autoreactive T cells

62. A researcher observes that a mouse lacking ZAP-70 has no mature $CD4^+$ or $CD8^+$ T cells. Which process is disrupted?

(A) V(D)J recombination

(B) TCR signalling during thymic selection

(C) Somatic hypermutation

(D) Class-switch recombination

63. Which antibody class would be most protective at mucosal surfaces such as the respiratory tract?

(A) IgE (B) IgM

(C) IgG (D) IgA

64. A patient's lymphocytes respond normally to foreign antigens but also strongly react to self-antigens. Which mechanism is most likely defective?

(A) Positive selection

(B) Central tolerance

(C) Complement activation

(D) Cytotoxic T cell killing

65. During vaccination, which B cell process ensures that subsequent exposures lead to production of higher-affinity antibodies?

(A) Clonal deletion

(B) Affinity maturation

(C) Negative selection

(D) T cell independent activation

66. A patient develops lupus due to production of anti-DNA antibodies. This is most likely caused by:

(A) Overactive NK cells

(B) Defective elimination of autoreactive B cells

(C) Excessive IgA secretion at mucosal surfaces

(D) Failure of somatic recombination

67. A person with a defect in CD40L expression shows low levels of IgG, IgA, and IgE but normal IgM. This condition is best explained by:
(A) Impaired isotype switching
(B) Increased Treg activity
(C) Excessive somatic hypermutation
(D) Failure of complement activation

68. Compare Th1 and Th2 cell functions: Which of the following correctly distinguishes them?
(A) Th1 promotes humoral immunity; Th2 promotes cellular immunity
(B) Th1 produces IFN-$\gamma$; Th2 produces IL-4 and IL-5
(C) Th1 helps eosinophils; Th2 activates macrophages
(D) Th1 produces IL-17; Th2 produces TNF-$\alpha$

69. A patient with recurrent viral infections is found to have defective perforin and granzyme expression. Which immune cells are most impaired?
(A) B cells and plasma cells
(B) CD8+ T cells and NK cells
(C) CD4+ T cells and Tregs
(D) Dendritic cells and macrophages

70. Which of the following best explains the principle of Burnet's clonal selection theory?
(A) Antigen stimulates only those lymphocytes that possess complementary receptors, leading to clonal expansion
(B) Antigen exposure induces random generation of new receptors
(C) All lymphocytes respond equally to a single antigen
(D) Antigen-independent expansion of lymphocytes occurs in the thymus

71. Which enzyme is essential for V(D)J recombination in antibody and TCR gene rearrangement?
(A) AID (B) RAG1/2
(C) TdT (D) ZAP-70

72. The most immunogenic transplantation antigens are:
(A) ABO blood group antigens
(B) MHC molecules
(C) Minor histocompatibility antigens
(D) Rh antigens

73. HLA-B27 is strongly associated with which autoimmune disease?
(A) Systemic lupus erythematosus
(B) Ankylosing spondylitis
(C) Rheumatoid arthritis
(D) Multiple sclerosis

74. Which genetic mutation confers resistance to HIV infection?
(A) Duffy antigen mutation
(B) CCR5-$\Delta$32 mutation
(C) Sickle cell mutation
(D) G6PD deficiency

75. Which tumor-associated antigen is commonly elevated in liver cancer?
(A) CEA
(B) $\alpha$-fetoprotein (AFP)
(C) HER2
(D) p53

76. Which mechanism generates antibody diversity after antigen exposure rather than during B cell development?
(A) VDJ recombination
(B) Somatic hypermutation
(C) Junctional diversity
(D) Combinatorial diversity

77. Why are ABO mismatches more dangerous than HLA mismatches in transfusion?
(A) ABO antibodies are T cell-dependent
(B) ABO antibodies are preformed natural antibodies (IgM)
(C) ABO antigens are only present on leukocytes
(D) ABO mismatches only cause mild reactions

78. A patient with C3 deficiency develops frequent bacterial infections. Which immune function is primarily impaired?
(A) B cell receptor signalling
(B) Antibody diversity
(C) Complement-mediated opsonization
(D) NK cell killing

79. In multiple sclerosis, autoreactive T cells attack:
(A) Pancreatic β-cells
(B) Thyroid epithelial cells
(C) Myelin sheath in CNS
(D) RBC membranes

80. Sickle cell trait provides protection against malaria by:
(A) Inducing antibodies against *Plasmodium falciparum*
(B) Altering red blood cell environment unfavorable for parasite growth
(C) Activating NK cells against infected RBCs
(D) Blocking mosquito transmission

81. A patient with DiGeorge syndrome lacks a thymus. Which immune population will be most deficient?
(A) Plasma cells
(B) CD8+ T cells
(C) Neutrophils
(D) NK cells

82. During organ transplantation, a patient experiences rejection within minutes due to pre existing antibodies. This is:
(A) Acute rejection
(B) Chronic rejection
(C) Hyperacute rejection
(D) Graft-versus-host disease

83. A researcher discovers a new HLA allele associated with resistance to tuberculosis. This association most likely arises because:
(A) HLA alleles alter cytokine secretion by macrophages
(B) HLA polymorphism influences antigen presentation to T cells
(C) HLA mutations change antibody structure
(D) HLA genes code for antimicrobial peptides

84. A patient with HIV shows progressive CD4+ T cell depletion but preserved CD8+ T cells.Which immune responses will be most compromised?
(A) NK cell–mediated killing
(B) Antibody class switching and memory formation
(C) Complement activation
(D) Innate inflammation

85. Compare autoimmunity mechanisms: In Type 1 diabetes, the pathogenic mechanism is primarily:
(A) Autoantibodies against insulin receptors (Type II hypersensitivity)
(B) Immune complex deposition in pancreatic islets (Type III hypersensitivity)
(C) T cell–mediated destruction of β-cells (Type IV hypersensitivity)
(D) IgE-mediated mast cell activation (Type I hypersensitivity)

86. Which immunotechnique combines electrophoresis with immunodiffusion to separate and identify serum proteins?
(A) ELISA
(B) Immunoelectrophoresis
(C) Immunofluorescence
(D) Western blot

87. In a direct immunofluorescence assay, the antibody used is:
(A) Unlabeled and detected by secondary antibody
(B) Conjugated directly with a fluorochrome
(C) Radioisotope-labeled
(D) Immobilized on a solid surface

88. Which isotope is commonly used in Radioimmunoassay (RIA)?
(A) C-14 (B) P-32
(C) I-125 (D) H-3

89. Which of the following is a competitive immunoassay?
(A) Sandwich ELISA
(B) Indirect ELISA
(C) RIA
(D) Immunodiffusion

90. Which technique is most commonly used for in situ chromosome analysis with fluorescent probes?
(A) FACS
(B) ELISPOT
(C) FISH
(D) RIA

91. Why is indirect ELISA generally more sensitive than direct ELISA?
(A) Uses radioactive labels
(B) Employs secondary antibody amplification
(C) Requires fewer reagents
(D) Detects only IgM antibodies

92. Double diffusion in Ouchterlony assay demonstrates:
(A) Number of epitopes on antigen
(B) Antigen-antibody precipitation patterns
(C) Protein separation by charge
(D) Cell cytotoxicity

93. A key advantage of monoclonal antibodies over polyclonal antibodies is:
(A) Ability to recognize multiple epitopes
(B) High reproducibility and uniformity
(C) Rapid and inexpensive production
(D) Stronger immune response in vivo

94. The zone of equivalence in precipitation reactions refers to:
(A) Excess antigen present
(B) Excess antibody present
(C) Antigen and antibody at optimal ratio for lattice formation
(D) No antigen present

95. Which technique can both measure and sort specific cell populations based on surface markers?
(A) ELISA
(B) FACS
(C) Immunodiffusion
(D) Western blot

96. A patient sample is tested with ELISA for HIV. To confirm borderline results, which additional test would best validate the diagnosis?
(A) Agglutination test
(B) Immunodiffusion
(C) Western blot
(D) Immunoelectrophoresis

97. A researcher wants to quantify the number of cytokine-secreting T cells after vaccination. Which assay should they use?
(A) ELISPOT
(B) Immunodiffusion
(C) RIA
(D) FISH

98. If a scientist needs to detect apoptosis in cultured T cells, the most suitable method would be:
(A) Agglutination assay
(B) Annexin V/PI staining by flow cytometry
(C) Immunoelectrophoresis
(D) RIA

99. A hybridoma cell line is generated in the lab. What is its primary function?
(A) Producing multiple antibody isotypes
(B) Producing monoclonal antibodies indefinitely
(C) Generating polyclonal serum
(D) Measuring complement activity

100. During a cytotoxicity assay, NK cells are tested against tumor cells. Which readout
would best indicate target cell lysis?
(A) Precipitation arcs
(B) Fluorescent antibody staining
(C) Release of radioactive chromium (51Cr)
(D) Immunodiffusion pattern

## Rough Work / रफ कार्य

**Example :**

**Question :**

Q.1 Ⓐ ● Ⓒ Ⓓ

Q.2 Ⓐ Ⓑ ● Ⓓ

Q.3 Ⓐ ● Ⓒ Ⓓ

5. Each question carries equal marks. Marks will be awarded according to the number of correct answers you have.

6. All answers are to be given on OMR Answer Sheet only. Answers given anywhere other than the place specified in the answer sheet will not be considered valid.

7. Before writing anything on the OMR Answer Sheet, all the instructions given in it should be read carefully.

8. After the completion of the examination, candidates should leave the examination hall only after providing their OMR Answer Sheet to the invigilator. Candidate can carry their Question Booklet.

9. There will be no negative marking.

10. Rough work, if any, should be done on the blank pages provided for the purpose in the booklet.

11. To bring and use of log-book, calculator, pager & cellular phone in examination hall is prohibited.

12. In case of any difference found in English and Hindi version of the question, the English version of the question will be held authentic.

**Impt. On opening the question booklet, first check that all the pages of the question booklet are printed properly. If there is any discrepancy in the question Booklet, then after showing it to the invigilator, get another question Booklet of the same series.**

**उदाहरण :**

**प्रश्न :**

प्रश्न 1 Ⓐ ● Ⓒ Ⓓ

प्रश्न 2 Ⓐ Ⓑ ● Ⓓ

प्रश्न 3 Ⓐ ● Ⓒ Ⓓ

5. प्रत्येक प्रश्न के अंक समान हैं। आपके जितने उत्तर सही होंगे, उन्हीं के अनुसार अंक प्रदान किये जायेंगे।

6. सभी उत्तर केवल ओ०एम०आर० उत्तर-पत्रक (OMR Answer Sheet) पर ही दिये जाने हैं। उत्तर-पत्रक में निर्धारित स्थान के अलावा अन्यत्र कहीं पर दिया गया उत्तर मान्य नहीं होगा।

7. ओ०एम०आर० उत्तर-पत्रक (OMR Answer Sheet) पर कुछ भी लिखने से पूर्व उसमें दिये गये सभी अनुदेशों को सावधानीपूर्वक पढ़ लिया जाये।

8. परीक्षा समाप्ति के उपरान्त परीक्षार्थी कक्ष निरीक्षक को अपनी OMR Answer Sheet उपलब्ध कराने के बाद ही परीक्षा कक्ष से प्रस्थान करें। परीक्षार्थी अपने साथ प्रश्न-पुस्तिका ले जा सकते हैं।

9. निगेटिव मार्किंग नहीं है।

10. कोई भी रफ कार्य, प्रश्न-पुस्तिका में, रफ-कार्य के लिए दिए खाली पेज पर ही किया जाना चाहिए।

11. परीक्षा-कक्ष में लॉग-बुक, कैल्कुलेटर, पेजर तथा सेल्युलर फोन ले जाना तथा उसका उपयोग करना वर्जित है।

12. प्रश्न के हिन्दी एवं अंग्रेजी रूपान्तरण में भिन्नता होने की दशा में प्रश्न का अंग्रेजी रूपान्तरण ही मान्य होगा।

**महत्वपूर्णः प्रश्नपुस्तिका खोलने पर प्रथमतः जाँच कर देख लें कि प्रश्नपुस्तिका के सभी पृष्ठ भलीभाँति छपे हुए हैं। यदि प्रश्नपुस्तिका में कोई कमी हो, तो कक्षनिरीक्षक को दिखाकर उसी सिरीज की दूसरी प्रश्नपुस्तिका प्राप्त कर लें।**