

# Post Graduate Diploma in HIV Medicine (PGDHIVM)

# **ASSIGNMENTS 2024**

PGDHIVM/AS 1-9

HIV Medicine Cell School of Health Sciences Indira Gandhi National Open University Maidan Garhi, New Delhi-110 068

#### Dear Student,

As explained in the Programme Guide, there are nine assignments in total and **all** these assignments are compulsory. Please note that the assignments carry a weightage of 30% marks towards the final evaluation in theory component and *submission of related assignments is a prerequisite* for appearing in theory term-end examination for respective papers. It is always better if you can submit all assignments as early as possible during your contact session.

Last Date of Submission	Course Code	<b>Blocks Involved</b>	Assignment Code	
October 30, 2024	MCMM-101	1 and 2	MCMM-101/AS-1	
	MCMM-101	3 and 4	MCMM-101/AS-2	
	MCMM-102	1 and 2	MCMM-102/AS-3	
	MCMM-102	3 and 4	MCMM-102/AS-4	
	MCMM-103	1 and 2	MCMM-103/AS-5	
	MCMM-103	3 and 4	MCMM-103/AS-6	
	MCMM-104	1 and 2	MCMM-104/AS-7	
	MCMM-104	3 and 4	MCMM-104/AS-8	
	MCMM-104	5 and 6	MCMM-104/AS-9	

Please take note of the following points before writing your assignments:

- Use only foolscap size paper for writing your responses. Only handwritten assignments will be accepted. Typed or printed copies of assignments will not be accepted.
- Tie the pages after numbering them carefully.
- Write the questions and question number with each answer.
- All the questions are compulsory.
- Zero marks will be given if it is found that the answers were copied from other student
- Every assignment will be evaluated out of a full mark of 100. Weightage is indicated in parenthesis against each question.

#### Suggestions for writing an assignment:

Read the assignments carefully. Go through the units on which the answers are based. Draw a rough outline of your answer. Make a logical order. Then write your answer neatly and submit. Give illustrations and tables wherever necessary. You may keep a xerox copy of the answer sheets for future reference.

Answer each assignment in separate sheets. On the first page of the assignment response sheet, write the course code, course title, assignment code, name of your programme study centre and date of submission. Your Roll No., Name and Full address should be mentioned in the top right corner of the first page. The first page of your response sheet should look like the format given.

Course Code	Enrollment No.	
Course Title	Name	
Assignment Code	Address	
PSC		
Date of Submission		

Please submit the assignments to your Programme-in-charge (PIC) only.

#### Assignment – 1 (Block 1 & 2)

# Course Code: MCMM – 101 Assignment Code: MCMM – 101/AS-1 Maximum Marks - 100

#### **Answer All Questions**

#### 1. Answer the following questions within 750 words (2X20 – 40 marks)

- a. Describe in detail the sequence of events after an individual gets the HIV infection/ the HIV enters the body. Describe the factors that determine the progression of HIV infection.
- b. Describe the various models used for HIV estimation in India. Also discuss the HIV estimation and modelling process

#### 2. Answer each of the following questions within 300 words. (6X10=60 marks)

- a. Discuss the molecular epidemiology of HIV.
- b. Enumerate various receptors and co-receptors involved in entry of HIV into the host cell.
- c. Classify and list the types and sub types of HIV.
- d. Role of genetics in Drug Resistance.
- e. Describe the current global scenario of HIV/AIDS.
- f. Enumerate the different factors influencing disease progression in HIV infection.

#### Assignment – 2 (Block 1 & 2)

# **Course Code: MCMM – 101** Assignment Code: MCMM - 101/AS-2 Maximum Marks - 100

#### **Answer All Questions**

#### 1. Answer the following questions within 750 words.

- a. Describe the relationship of CD4 count and opportunistic infections in HIV. Stage HIV infected patients based on presentation of OIs (opportunistic infections).
- b. A 24 yr old PLHIV presents with fever, weight loss (~ 20Kg) and painful deglutination. What WHO clinical stage of HIV infection is the patient in? Describe the differences between WHO clinical staging and CDC classification of HIV infection in adults.

#### 2. Answer the following questions within 300 words

- a. Discuss the various strategies of HIV testing.
- b. Describe CD4 T cells and viral load testing as used in the National Programme.
- c. Describe the various methods for HIV– DR testing.
- d. Discuss the diagnosis of HIV infections in children and infants below 18 months of age.
- e. Describe the common clinical manifestations of HIV infections in an adult.
- f. Discuss briefly WHO clinical staging of HIV disease in adults and adolescents.

(10X6 = 60 marks)

(2X20 = 40 marks)

#### Assignment – 3 (Block 1 & 2)

# Course Code: MCMM – 102 Assignment Code: MCMM – 102/AS-3 Maximum Marks - 100

#### **Answer All Questions**

#### 1. Answer the following question within 750 words.

- a. Define targeted interventions. Discuss the targeted intervention strategies under NACP IV for intravenous drug users (IDUs).
- b. Discuss the linkages of the National AIDS control programme with other National Programmes.
  Describe in detail the linkages with the RNTCP.

#### 2. Answer each of the following question within 300 words.

- a. Describe the concept and roles of Link Art Centres (LAC).
- b. Discuss the basics of social marketing of condom under the NACP.
- c. Outline the strategic information management system (SIMS). Discuss its role in the NACP.
- d. Role of ASHA in HIV Care
- e. Discuss the strategies for prevention of HIV infection in the general population.
- f. Describe the roles and responsibilities of the state AIDS control societies (SACS) in the NACP.

(2X20 = 40 marks)

(10X6=60 marks)

#### Assignment – 4 (Block 1 & 2)

# Course Code: MCMM – 102 Assignment Code: MCMM – 102/AS-4 Maximum Marks - 100

(10X6=60 marks)

(2X20 = 40 marks)

#### **Answer All Questions**

#### 1. Answer the following question within 750 words.

- a. Define Blood Safety. Discuss the components of Blood Safety under the NACP IV.
- b. Write about services provided at Integrated Counseling and Testing Centres (ICTC). Describe briefly HIV Sentinal Surveillance (HSS).

#### 2. Answer each of the following question within 300 words.

- a. Discuss positive prevention.
- b. Describe the components of universal precautions.
- c. Discuss the concept, effectiveness and challenges of male circumcision as a prevention mechanism.
- d. Role of Telecommunications and Mass Media in HIV prevention.
- e. Describe the welfare schemes for PLHIV in India.
- f. Human Rights and HIV.

#### Assignment – 5 (Block 1 & 2)

# Course Code: MCMM - 103 Assignment Code: MCMM - 103/AS-5 Maximum Marks - 100

#### **Answer All Questions**

#### 1. Answer the following question within 750 words.

- a. List the upper and lower respiratory tract infections which can be seen in PLHIV. Describe the clinical features, diagnosis and treatment of bacterial pneumonia.
- b. A 30 year old male truck driver was admitted with history of fever and generalized headache for one month and altered sensorium for three days prior to admission. On examination the patient was drowsy, had neck rigidity, but there was no focal neuro deficit. He was found to be HIV +ve with a CD 4 count of 90 cells/mm<sup>3</sup>. CSF examination showed budding yeast like structures.
  - i) What is the diagnosis?
  - ii) What tests will you do to confirm your diaganosis?
  - iii) How do you treat this condition?
  - iv) When will you start ART?
  - v) How will you treat his headache?

#### 2. Answer each of the following question in 300 words.

- a. Adrenal gland involvement in HIV.
- b. Management of HIV/HBV co-infection.
- c. Approach to a PCHIV presenting with Anemia.
- d. AIDS defining cancers
- e. Common causes of fluid and electrolyte disturbances in HIV infection
- f. Complications of severe falciparum malaria.

(10X6=60 marks)

(2X20 = 40 marks)

#### Assignment – 6 (Block 1 & 2)

# Course Code: MCMM – 103 Assignment Code : MCMM – 103/AS-6 Maximum Marks - 100

(2X20 = 40 marks)

#### **Answer All Questions**

#### 1. Answer the following question within 750 words.

- a. Describe briefly the management of tuberculosis in HIV infected individuals.
- b. Enumerate the various dermatological disorders highly indicative of HIV infection & discuss the diagnosis & management of any one of them.

#### 2. Answer each of the following question within 300 words. (6X10=60 marks)

- a. Kaposi's Sarcoma
- b. Etiolegy, diagnosis and management of Penicillosis
- c. Diagnosis of Tubercular Pericardial effusion.
- d. What are the three 'I' methods for reducing burden of Tuberculosis among HIV infected.
- e. Adverse effects of Anti Tubercular Treatment in HIV.
- f. Clinical features of Tuberculosis in children.

#### Assignment – 7 (Block 1 & 2)

# Course Code: MCMM – 104 Assignment Code: MCMM – 104/AS-7 Maximum Marks - 100

#### **Answer All Questions**

#### **1.** Answer the following question within 750 words. (2X20 = 40 marks)

- a. What are Nucleoside Reverse Transcriptase Inhibitors (NRTI's)? Discuss the mechanism of action, dosage and adverse effects of NRTIs used in the National Programme regimens.
- b. Describe the ART initiation (first line) guidelines under the NACP.

#### 2. Answer each of the following question within 300 words. (6X10=60 marks)

- a. Describe the adverse effects of Protease Inhibitors (PIs).
- b. Describe the ART- preparedness counseling.
- c. Discuss the mechanism to improve adherence to ART in PLHIV.
- d. Discuss the concepts of "Substitution" in First Line ART. Describe the substitutions done in the National Programme.
- e. Discuss the clinical and immunological monitoring of a patient on ART under the national programme.
- f. Define IRIS. Discuss the different categories of IRIS. Describe the causes of IRIS.

#### Assignment – 8 (Block 1 & 2)

## Course Code: MCMM – 104 Assignment Code: MCMM – 104/AS-8 Maximum Marks - 100

(20 marks)

#### **Answer All Questions**

#### 1. Answer the following question within 750 words.

# a. Discuss the role of the PPTCT programme in the National AIDS control programme : its concept, responsibilities and interventions.

#### 2. Answer each of the following in 300 words.

#### (8X10=80 marks)

- a. ART is HIV 2 infection.
- b. State AIDS clinical expert panel (SACEP) roles, responsibilities, mechanism.
- c. Discuss the strategy to assess to risk of HIV transmission to a health care worker after a suspected exposure.
- d. Describe the indicators of programme monitoring at the ART centre level.
- e. Discuss the approach to ART modification is a PLHIV with known liver disease.
- f. Describe the national ART initiation guidelines for PLHIV with Hepatitis B and C co-infections.
- g. Discuss the concept of "continum of care" specifically in the context of women.
- h. Describe the package of sexual and reproductive health for women living with HIV.

#### Assignment – 9 (Block 1 & 2)

# Course Code: MCMM – 104 Assignment Code: MCMM – 104/AS-9 Maximum Marks - 100

#### **Answer All Questions**

#### 1. Answer the following question within 750 words.

- a. Discuss common opportunistic infection in children.
- b. Describe the clinical and immunological criteria used for determining ART eligibility in children under the national programme.

#### 2. Answer each of the following question in 300 words.

- a. Describe the early warning signs of developmental delay in children.
- b. Discuss the behavior change models and theories.
- c. Describe the types of counseling in the national programme.
- d. Discuss the concept, mechanisms and challenges of Nutritional Supplementation in the national programme.
- e. Discuss HIV counseling in adolescents infected with HIV.
- f. Discuss the OP prophylaxis provided to children living with HIV infection.

(20 marks)

(6X10=80 marks)