Question Paper Specific Instructions

Please read each of the following instructions carefully before attempting questions:

There are EIGHT questions divided in TWO SECTIONS and printed both in HINDI and in ENGLISH.

Candidate has to attempt FIVE questions in all.

Questions no. 1 and 5 are compulsory and out of the remaining, any THREE are to be attempted choosing at least ONE question from each section.

The number of marks carried by a question / part is indicated against it.

Answers must be written in the medium authorized in the Admission Certificate which must be stated clearly on the cover of this Question-cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in a medium other than the authorized one.

Word limit in questions, wherever specified, should be adhered to.

Illustrate your answers with suitable sketches and diagrams, wherever considered necessary. Coloured pencils may be used for the purpose.

Attempts of questions shall be counted in sequential order. Unless struck off, attempt of a question shall be counted even if attempted partly. Any page or portion of the page left blank in the Question-cum-Answer Booklet must be clearly struck off.
Q1. (a) (i) enumerate the causes of acute hepatitis.
(ii) What are the natural history and clinical manifestations of chronic hepatitis-C infection?
(iii) What are the direct acting antiviral agents for hepatitis-C infection?

(b) एक 10 मह का शिशु जिसे “फेलोट्रोस चतुःक्षम” है, बालचिकित्सा आयुर्विज्ञान वार्ड में लाया जाता है। उसका इतिहास अत्यधिक रोना और उसके बाद कष्ट-रवासित होना, उन्नीदा हो जाना है और नीला पड़ जाना है।
(i) इस शिशु में संभवतः निदान क्या है? इस निदान का आधार भी दीजिए।
(ii) इस अवस्था के प्रबंधन का वर्णन कीजिए।

A 10-month-old infant with “Tetralogy of Fallot” is brought to the paediatric emergency ward with history of excessive crying and then becoming dyspneic, drowsy and bluish.
(i) What is the likely diagnosis in this infant? Mention the basis for diagnosis.
(ii) Describe the management of this condition.

(c) (i) “दिलवृत्ती विकार” के हेतु-विकृतितज्ञन, रोगलक्षणों तथा प्रबंधन का वर्णन कीजिए।
(ii) सामान्यतः इस्तेमाल की जाने वाली मनोविश्लेषण-रोधी औषधियों के अनुप्रयोग प्रभावों को गिनाइए।
(i) Describe the aetio-pathogenesis, clinical features and management of “Bipolar Disorder”.
(ii) Enumerate the side effects of commonly used anti-psychotic drugs.
Q2. (a) A middle-aged hypothyroid woman on irregular medication became drowsy two days ago following an episode of fever.

(i) What could be the causes of drowsiness in this patient?
(ii) How will you diagnose and manage the patient?
(iii) State cardio-vascular manifestations in hypothyroidism.  

(b) A 16-month-old child attending Paediatrics OPD with past history of diarrhoea and respiratory infections was found to have loss of subcutaneous fat and weight of 5.5 kilograms.

(i) Which physical examination findings would help you to arrive at diagnosis in this child?
(ii) Describe the two phases of treatment for this condition.

(c) Classical scabies differ from “Crusted” scabies infection.

(i) How do you treat “Crusted” scabies infection in an institution?

(d) A 16-month-old child attending Paediatrics OPD with past history of diarrhoea and respiratory infections was found to have loss of subcutaneous fat and weight of 5.5 kilograms.

(i) Which physical examination findings would help you to arrive at diagnosis in this child?
(ii) Describe the two phases of treatment for this condition.

(e) Classical scabies differ from “Crusted” scabies infection.

(i) How do you treat “Crusted” scabies infection in an institution?
(b) A 10-month-old infant having watery nasal discharge for the last 2 days developed rapid breathing, chest retraction and decreased feeding over the last one day.

(i) What is the likely diagnosis in this patient?
(ii) Enumerate the microbiological agents for this condition.
(iii) Discuss the investigations and management of this condition.

(c) Describe various theories which have been proposed to explain the pathogenesis of vitiligo.
(i) How do you assess the severity of vitiligo?
(ii) Describe the lines of treatment of various grades of the disease.

Q3. (a) An adult male patient, suffering from a persistent, irregular, and severe cough since last year, is referred to you with a suspicion of tuberculosis. After thorough examination, it is confirmed that he has tuberculosis. How would you manage this patient?

(i) What is the probable cause of this disease?
(ii) What are the essential characteristics of tuberculosis that need to be managed?
(iii) What are the key steps to take in managing this disease?
A young male patient came to the medical emergency department with fever, headache and recurrent vomiting. He was also having some skin lesions on both lower limbs and abdomen. On clinical examination, he was drowsy and having neck rigidity.

(i) What is his differential diagnosis?
(ii) Discuss in brief the clinical manifestations, diagnosis and management of acute meningitis.
(iii) What are the causes of recurrent meningitis?  

A 32-week preterm neonate born by a Caesarian section is found to have a respiratory rate of 70/minute, grunting and cyanosis within half an hour of birth.

(i) What is the most likely diagnosis in this neonate?
(ii) Describe the management of this condition.
(iii) Write about its important complications.

A young woman presented to the emergency department with a history of pesticide intake. She has massive frothing from the mouth and nose.

(i) Which is the pesticide she is likely to have consumed?
(ii) State what would be the clinical features and management in this patient.
(iii) Define the “Intermediate Syndrome” which may occur in this setting and its management.
Q4. (a) एक 13 माह के बालक को, जिसे छह बार पतला शीत्य आया है और निरंतर वमन हो रहा है, उसकी मां आपातकालीन बार्ड में लेकर आती है। शारीरिक जॉइंच करने पर यह बालक निरक्षित है और उसकी नांदी दर 160 प्रति मिनट है।

(i) उसकी रुग्णता की गंभीरता के आकलन हेतु कौन-कौन से खतरनाक चिह्नों के बारे में पूर्ण जाना चाहिए और देखा जाना चाहिए?
(ii) यदि इस बालक में तीव्र निर्जितीविवर के लक्षण हैं, तो उसका उपचार कैसे करें?
(iii) यदि बालक की स्वस्थि अस्पताल से छुट्टी पाने लायक हो गई है, फिर भी उसे 2 – 3 बार पतला शीत्य हुआ है, तब इस बालक की माता को आप क्या सलाह देंगे?

A 13-month-old boy was brought by his mother with six episodes of loose stools and persistent vomiting to the emergency ward. He was found to be lethargic and his pulse rate was 160 per minute.

(i) What are the danger signs you would ask for and look for in this child to assess the severity of his illness?
(ii) If you find severe dehydration, how will you treat the child?
(iii) If the child is fit to be discharged, yet has 2 – 3 episodes of loose stools, what advice would you give to the mother? 5+5+5=15

(b) (i) अतिरिक्तदाब को वर्णित करने से संबंधित बर्तमान मार्गदर्शक निर्देश क्या हैं?
(ii) द्वितीयक अतिरिक्तदाब के कारण गिनाइए।
(iii) कार्य-यांत्रिकी के आधार पर विभिन्न अतिरिक्तदाब-रोगी दवाओं के नाम गिनाइए।
(i) What are the current guidelines regarding the classification of hypertension?
(ii) Enumerate the causes of secondary hypertension.
(iii) Enumerate the various anti-hypertensive drugs based on their mechanism of action. 8+6+6=20

(c) एक 70-वर्षीय पुरुष, जो विगत दो सप्ताह से उवडता प्रीग्राह अस्थिभंग के कारण शरीरस्थ पर आक्रामित हो अर्थात अल्फिकदम से व्यापारों विभिन्न भाग में लागी जाता है।

(i) ऐसे में संभावित निदान क्या है?
(ii) आप इस रोगी का रोग-निदान कैसे करेंगे?
(iii) इस रोगी का प्रबंधन क्या होगा?

A 70-year-old male, bed-ridden for the last 2 weeks following a fracture of the femoral neck, presented to the medical emergency department with sudden breathlessness and hypotension.

(i) What is the likely diagnosis?
(ii) How would you diagnose this patient?
(iii) What would be the management for this patient? 3+6+6=15
Q5. (a) A 40-year-old lady presents in the OPD with complaint of right breast lump for the last one year which is progressively increasing in size.

(i) How will you evaluate this patient?

(ii) Briefly outline the treatment of “early breast cancer”.

(b) A 25-year-old young patient is presented to the emergency department with severe pain in abdomen for the last 3 hours. On clinical examination, the patient is oriented, but is dehydrated, having tachycardia with a blood pressure of 90/60 mm Hg.

(i) Discuss the differential diagnosis of this patient.

(ii) How will you investigate the case?

(iii) Briefly outline the management of peptic ulcer perforation peritonitis.

(c) (i) Combined oral contraceptives (COC) work?

(ii) What effect do the COC have on the menstrual cycle?

(iii) What is meant by “breakthrough bleeding”? What are its common causes?
(d) “अन्वाचेय” जननअस्मता के संभावित कारण क्या-क्या हैं?
What are the possible reasons for “unexplained” infertility?

(e) (i) जानपदिक रोगविवाह की दृष्टि से देश के विभिन्न भागों में डेंगू फैलने के क्या-क्या कारक हैं, संक्षेप में विवेचना कीजिए।
(ii) डेंगू की रोकथाम और नियंत्रण हेतु राष्ट्रीय रोगवाहक जात रोग नियंत्रण कार्यक्रम निदेशालय द्वारा निर्धारित किए गए मार्गदर्शक निर्देशों की संक्षेप में विवेचना कीजिए।

(i) Discuss in brief the epidemiological factors which have led to the spread of dengue in different parts of the country.
(ii) Discuss in brief the guidelines laid down by the Directorate of National Vector Borne Diseases Control Programme for the prevention and control of dengue.

Q6. (a) अपरा-पुष्पक्षमन के पर्वतारु एक महिला जो 28 सप्ताह के गर्भ से है, का प्रसव करते समय आप किन-किन मुद्दों पर उसकी काउंसलिंग करें?
Write notes on issues you would raise in counselling a woman about to be delivered at 28 weeks gestation after placental abruption.

(b) एक 40-वर्षीय पुरुष रोगी, जिसे समय-समय पर विगत 4 माह से रक्तमेह होता रहा है, आता है।
(i) रक्तमेह के कारण गिनाइए।
(ii) इस रोगी में रोगनिदर्शन तक पहुँचने के लिए, आप उसकी जाँच-परीक्षण कैसे करें?
(iii) वृक्क पत्थर के उपचार की विवेचना कीजिए।
A 40-year-old male patient is presented with hematuria off and on for the last 4 months.

(i) Enumerate the causes of hematuria.
(ii) How will you investigate the patient to reach the diagnosis?
(iii) Discuss the treatment of renal stones.

(c) (i) राष्ट्रीय परिवार स्वास्थ्य सर्वेक्षण-4 से उपलब्ध हुए आँकड़ों के अनुसार भारत में पोषण अर्थात की समस्या कितनी गंभीर है? आँकड़ों को साक्ष्य के रूप में देने हुए अपने कथन का प्रमाणीकरण कीजिए।

(ii) “राष्ट्रीय लोह+ पहल” के अंतर्गत किन-किन विशिष्ट समूहों को विशेषकर लक्ष्य में रखा गया है?
(iii) “राष्ट्रीय लोह+ पहल” के अंतर्गत लक्ष्य में रखे गए प्रत्येक एक समूह के लिए क्या-क्या विशेष माध्यमस्त्राएँ (उपाय) करने का प्रावधान है?
(iv) “राष्ट्रीय लोह+ पहल” के परिपातन के लिए सेवाएँ देने हेतु क्या-क्या कार्य-पद्धतियाँ अमल में लाई जा रही हैं?

EGT-D-MDCS
(i) As per the National Family Health Survey-4, how grave is the situation in India with regard to Nutritional Anaemia. Give statistics substantiating your statement.

(ii) Under the “National Iron+ Initiative”, which are the specific groups being specially targeted?

(iii) What specific interventions are being employed for different target groups under the National Iron+ Initiative?

(iv) What are the mechanisms of service delivery being employed to implement the National Iron+ Initiative?

Q7. (a) अध्याय की स्पष्टता शिक्षा के हेतुकी-विकृतितजनन, चिकित्सकीय लक्षण, जांच-परीक्षण तथा प्रबंधन का वर्णन कीजिए।

Describe the aetio-pathogenesis, clinical features, investigations and management of varicose veins of lower limbs.

(b) (i) “MISSION इंद्रधनुष” कार्यक्रम को स्वापित करने के पीछे का आधार संक्षेप में बताइए। मिशन इंद्रधनुष कार्यक्रम के लक्ष्य तथा अंतिम च्ये क्या-क्या हैं?

(ii) अभी हाल में सरकार ने “तीनब्रुके (ईंटीसीफाइड) मिशन इंद्रधनुष” कार्यक्रम का शुभारंभ किया है। इसे लागू करने में शामिल क्या विचारधारा, क्या विशेष केंद्रों तथा क्या क्रियान्वयन योजना व्यवहार में ला रहा है, इसकी विवेचना कीजिए।

(i) Briefly state the basis which led to setting up of the programme “Mission Indradhanush”. What are its targets and eventual goals?

(ii) More recently, the government has launched “Intensified Mission Indradhanush”. Discuss the thoughtline, specific focus, and operative strategy which govern its implementation.

(c) एक 45-वर्षीय बहुप्रमुखा महिला को विगत दो वर्ष तक अत्यधिक व अनियमित रजोधर्म होने तथा बढ़ती जा रही शक्ति की समस्या है। चिकित्सकीय परीक्षण पर उसको पीता पाया गया है। उसके गर्भवती का आकार बढ़कर 12 समतल के माप पर है। उसकी गर्भवती शक्ति तथा उपाग्र समान्य है। आप रोगी का प्रबंधन कैसे करेंगे, कारण सहित वर्णन कीजिए।

A 45-year-old multiparous woman presents with a 2-year history of heavy, irregular periods and increasing tiredness. On clinical examination, she appears pale. The uterus is enlarged to 12 weeks in size. The cervix and adnexae are unremarkable. Describe, giving reasons, how you would manage the case.
(a) A high maternal mortality rate continues to be a major public health challenge before the country. Keeping that in context, answer the following questions:

(i) How is “Maternal Mortality Rate” (MMR) defined? State the major causes of maternal mortality in the country.

(ii) The recent data indicates a major decline in MMR in the country. Briefly state, with due reasons, the various governmental initiatives which have led to this favourable decline in maternal mortality rate in India.

(iii) The government has grouped the different states in the country in a specific manner to obtain a greater understanding of the ground situation and to map the changes following its initiatives. Briefly outline this strategy, and its benefits.

(b) (i) Prasamanya Sanjapta through Asamanya Sanjapta in manvee koorioorik gonyedotroopin mein hohan bari budi ke vinaya mein kya antar pada jata hai?

(ii) Adhipkash pher par sanjapta pariksha kintu sahi hote hai?

(iii) Sanjapta pariksha ke mithya poota two and mithya negativ hohan ke sabse aam karana kya hai?

(i) How does the pattern of rise in human chorionic gonadotropin (HCG) differ between a normal and abnormal pregnancy?

(ii) How accurate are most home pregnancy tests?

(iii) What are the most common causes of false positive and false negative pregnancy tests?
(c) (i) Enumerate the indications and complications of colonoscopy.
(ii) Outline the principle of primary survey in trauma.
(iii) Enumerate the advantages and disadvantages of “laparoscopic surgery”.

5+5+5=15