

metronidazole		successful				above	
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10

A 30 year old presented with genital ulcer and discharge, genital discharge was collected and subjected for gram staining. The smear showed gram-negative intracellular bean-shaped cocci. The sample was sent for culture. What is the ideal transport medium to be used in this case? (1)

1) Blood agar	2) Chocolate agar	3) Mueller-Hilton agar	4) Amies medium
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11

Strawberry cervix is classically seen in

1) Herpes simplex virus	2) Neisseria gonorrhoeae	3) Chlamydia trachomatis	4) Trichomonas vaginalis
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12

A 12 year old boy developed Acute glomerulonephritis a week after he had Pyoderma. The etiological agent can be identified by the serotyping of (1)

1) Capsule	2) M proteins	3) Pili	4) Carbohydrate
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13

A 33 year old smoker was admitted with pneumonia. His sputum was subjected to serological test and was positive for sputum Mycoplasma pneumoniae. What is the staining method used to stain the colonies? (1)

1) Seller's method	2) Giemsa stain	3) Diene's method	4) Papanicolaou stain
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14

Wool sorters disease is caused by,

1) Bacillus anthracis	2) Staphylococcus aureus	3) Streptococcus pyogenes	4) Streptococcus pneumoniae
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15

Following organisms cause sexually transmitted disease **EXCEPT** (1)

1) Neisseria gonorrhoeae	2) Chlamydia trachomatis	3) Trepanoma pallidum	4) Gardenella vaginalis
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16

The most **commonly** used method for the isolation of Chlamydia species is (1)

1) Culture on artificial media	2) Culture on vero cell line	3) Inoculation into guinea pig	4) Culture on McCoy cell line
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17

Which of the following is **NOT** recommended as first aid following needle stick injury (1)

1) Keep the exposed site to the running water	2) Squeeze the blood from injury site	3) Spit fluid immediately from mouth and rinse the mouth	4) Do not use antiseptic at the exposed site
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18

Positive tuberculin test is indicated by an area of induration of (1)

1) < 5 mm in diameter	2) 6-9 mm in diameter	3) No induration	4) > 10 mm in diameter
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19

Which parameter is **NOT** included in HAI surveillance? (1)

1) CRBSI(Catheter related blood stream infections)	2) CAUTI(Catheter associated urinary tract infections)	3) VAP(Ventilator associated pneumonia)	4) Open wound infections
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20

The sterilisation conditions (temperature and holding time) required for autoclave are (1)

1) 121°C for 15 min	2) 120°C for 40 min	3) 150°C for 1 hour	4) 100°C for 2 hour
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LONG ESSAY QUESTIONS: 2 X 10 = 20

Answer all the questions.

21

A 28 year old male having a history of sexual exposure with a commercial sex worker presented to a STD clinic with painless hard indurated genital ulcer and painless hard bilateral inguinal lymph node enlargement. (10)

a) What is the clinical diagnosis ?

- b) What are the clinical manifestations of this condition?
c) Discuss the laboratory diagnosis of this condition. (2+3+5)

22			Define Zoonotic infections. Enumerate the bacterial zoonotic diseases. Discuss the pathogenesis and laboratory diagnosis of Human plague.(1+3+3+3)	(10)
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SHORT ESSAY QUESTIONS: 9 X 5 = 45

Answer all the questions.

23			A four month old child was brought to a OPD from a remote village with complaints of severe cough ending with a whoop for the past 10-12 days. The boy had apnea during the bouts but sleeps comfortably between the bouts. No history of immunization since birth. The laboratory reported Bordetella pertussis from the nasopharyngeal swab.(3+2) a) What is the pathogenesis of this condition? b) How to prevent this infection? (3+2)	(5)
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24			A 5 year old Patient (without wearing mask) complaints of dry cough, sore throat and fever visited a hospital. The security guided him to go to the casualty. The resident doctor (without mask) took history and examined the patient. His throat swab was sent for COVID 19 testing which came as positive. Subsequently the security and the resident doctor also turned positive for COVID 19. a) Identify the infection control breaches b) Discuss the Infection control measures to prevent the transmission of this infection. (2+3)	(5)
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25			A 57 year old multiparous woman presented to the Gynaecology OPD with the complaints of leucorrhoea (white discharge), the discharge being, thick, curdy white, with foul smell and dull lower abdominal pain. Her detailed history revealed that she was on long term corticosteroid therapy and oral contraceptives. What is the diagnosis? Discuss the the laboratory diagnosis of this condition and the management. (1+4)	(5)
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26			What is environmental cleaning? Discuss about OT sterilization. (2+3)	(5)
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27			Enumerate the bacteria causing the Meningitis. Discuss the pathogenesis and laboratory diagnosis of Acute bacterial meningitis.	(5)
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28			Describe the pathophysiology and laboratory modalities of Mucormycosis.	(5)
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29			A 40-year-old swimmer visited the emergency department with a 2-day history of persistent occipital excruciating and intolerable headache, fever, myalgia and fatigue. Physical examination revealed the presence of positive meningeal irritation sign and left Babinski sign. The brain CT scan demonstrated hydrocephalus, brain swelling and signs that confirmed cerebral hernia and meningoencephalitis. Subsequently, external ventricular drainage was placed and CSF samples were collected and examined. Trophozoites of <i>N. fowleri</i> were identified in the CSF via Wright-Giemsa staining and a diagnosis of PAM was made. a) What is primary amoebic meningoencephalitis? b) What is the pathogenesis of this condition? (1+4)	(5)
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30			Define Biomedical waste. List the steps of Biomedical waste management. Discuss in detail the segregation of waste of different color coded category.(1+2+2)	(5)
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31			An adult HIV seropositive male presented to the hospital with fever and altered mental status. On examination, he had low blood pressure and increased respiratory rate. His CSF examination showed budding yeast cells. What is the diagnosis? Discuss the the laboratory diagnosis of this condition. (1+4)	(5)
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SHORT ANSWER QUESTIONS: 5 X 3 = 15

Answer all the questions.

32			Enumerate the microorganisms causing opportunistic infections. Add a note on Vaginal thrush.	(3)
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33			Answer BCG vaccine under following headings: Type of vaccine, dose and route of administration.	(3)
34			Explain Kass concept of Significant Bacteriuria.	(3)
35			Enumerate the three complications of Diphtheria.	(3)
36			Write the conditions in which Informed consent is NOT mandatory.	(3)

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