MULTIPLE CHOICE QUESTIONS



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COMPONENTS OF MCQs



DIRECTION ITEM

- STEM
- ALTERNATIVES / RESPONSES / CHOICES -
 - KEY
 - DISTRACTORS

Directions for framing MCQs



Purpose Content Base on a single central problem Stem Choices

TYPES OF MCQS

- Single Best Response
 - Simple Completion Type
 - Question Type
 - Negative form type
 - Case History Type
- Multiple completion Type
- Independent True False Type
- Matching Type
- Assertion Reason (Relationship Analysis) Type
- Pictorial type

SIMPLE COMPLETION TYPE

Directions : Each of the questions below is followed by four alternatives . Select the best or the most appropriate answer and encircle the alphabet corresponding to it .

1. The organism that causes trichomonal infection is a

- A. bacteria
- B. fungus
- C. Protozoa
- D. spirochete

QUESTION TYPE

Keratin contains in _____ stratum of epidermis

Which stratum of epidermis contains keratin?

A. SpinosumB. GranulosumC. LucidumD. Corneum

NEGATIVE FORM TYPE

A patient receiving aminophylline intravenously to relieve asthmatic attack may show all the following reactions **EXCEPT**

A. hypotensionB. vomitingC. visual disturbancesD. hyperventilation

CASE HISTORY TYPE

Example :

- A 35 year old male who presented with fracture of the shaft of right humerus, developed inability to extend his right wrist and also had a loss of sensation over the back of right forearm and lateral half of dorsum of right hand. The most likely nerve injured would be
- A. Musculocutaneous
- B. Median
- C. Radial
- D. Ulnar

MCQ by participant

A 24 yr old male presented with fever with chills since 4 days. On examination he had fever of 40° C. pulse = 96/min, BP = 120/70 mm Hg, spleen was mildly enlarged, no hepatomegaly. He was well oriented in time, space and person. No abnormality detected with cardiovascular and respiratory system. What is the <u>specific test</u> the treating physician would recommend:-

- a. Peripheral smear for malarial parasite
- b. Hemoglobin estimation
- c. Blood grouping and cross matching
- d. Widal test

Single best response?

Disulfiram

- a) inhibits formation of acetaldehyde from ethanol
- b) is useful in treatment of acute ethanol poisoning
- c) is not effective in oral administration
- d) inhibits the oxidation of acetaldehyde to acetate

INDEPENDENT TRUE FALSE TYPE

For each of the following item below, the given statements are true or false. Select 'T' if True and 'F' if False

Pertaining to lymph node,

- A. It has a subcapsular sinus
- **B.** B lymphocytes are present in the germinal center
- C. Afferent lymphatics are present in the hilum
- D. T lymphocytes are present in the paracortical zone
- T/ F T/ F T/ F T/ F

MULTIPLE COMPLETION TYPE

For each of the questions below, one or more the answers given arecorrect. Select the appropriate letter as per the code given below:A: if 1, 2, 3 are correctB: if 1, 3 are correctC: if 2, 4 are correctD: if only 4 is correctE: if all 1, 2, 3, 4 are correct

Prolonged bed rest after surgery promotes hemostasis in deep veins of calf, which may lead to

- 1. cerebral embolism
- 2. coronary occlusion
- 3. pulmonary embolism
- 4. dry gangrene of the limb

MATCHING TYPE

Each question below consists of 3 numbered items on the left side and 5 lettered options on the right side. For each numbered item, select the suitable lettered option. Each lettered option may be chosen once, more than once, or not at all.

Types of glands 1. Adrenal cortex 2. Pituitary 3. Pancreas Hormones A. Epinephrine B. Insulin C. Aldosterone D. Cortisol E. Vasopressin

ASSERTION REASON TYPE

Each question given below consists of two statements: Assertion and

Reason connected by the word "**BECAUSE**". Select the appropriate letter as per the code given below:

- A: if both statements are true and the second statement is a correct explanation of the first statement
- **B:** if both statements are true but the second statement is a not a correct explanation of the first statement
- C: if the first statement is true but the second one is false
- **D:** if the first statement is false but the second one is true
- E: if both statements are false

The maintenance of fluid and electrolyte balance is more critical in children than in adults BECAUSE Renal function is immature in children

CHECKLIST : ITEM AS A WHOLE

- Is the direction clear?
- Is each item independent?
- Are all unrelated data eliminated?
- Is the language simple? Is it brief?
- Time appropriate?
- Are there abbreviations, eponyms, acronyms
- Negative stems?
- Is this the best format?



My mother-in-law was driving my brand-new sports car speedily along the sides of a cliff. She swerved and lost control when another car came from the other side. I fell out of the car and injured my arm. I presented with fracture of the shaft of right humerus, developed inability to extend his right wrist and also had a loss of sensation over the back of right forearm and lateral half of dorsum of right hand. The most likely nerve injured would be ...

BACK

In a case of acne,

- A. It is a chronic inflammatory disorder of the pilosebaceous units
- B. P. acne is implicated in the pathogenesis of neonatal acne
- C. Infantile acne is more common in female infants because of withdrawal of maternal oestrogens
- D. Cell mediated immunity and TLR-2 have been implicated in adult acne
- E. Benzoyl peroxide products and tretinoin products have a synergistic action and can be applied simultaneously

Best Rx of infected Seb. cyst is

- a) I & D
- b) I & D č avulsion
- c) Excision
- d) Antibiotics

CHECK LIST : STEM

- Is it clear, concise, unambiguous?
- Does it ask an opinion?
- Does it contain one word?
- Vague expressions?....fairly high, considerably greater.....
- All common elements placed in the stem?
- Double negatives?



Estrogen and progesteron receptor studies are done in

- a) Prostatic cancer
- b) Breast cancer
- c) Uterine cancer
- d) Cervical cancer

CHECK LIST : OPTIONS

- Are they logical and plausible?
- Parallel in form?
- Numerical order?
- Do all options complete grammatically?
- Distractors functional?
- None of the above?
- All of the above?
- Mutually exclusive? Synonyms?



Social smile in infant is achieved by age of

- a) 16 weeks
- b) 4 months
- c) 6 weeks
- d) 5 months

The spinal cord segment supplying umbilicus isA. T 11B. T 12

- C. T 10
- **D**. L 1

Which one of the following drugs is used for prophylaxis of asthma?

- A. Theophylline
- B. Salbutamol
- C. Disodium chromoglycate
- D. All of the above

Which of the following is a method of analytical epidemiology:-

- a) Cross-sectional studies
- b) Case studies
- c) Cohort studies
- d) None of the above

Cross-sectional studies is conducted to measure

- a) Prevalance of disease
- b) Incidence of disease
- c) Both incidence and prevalence of studies
- d) None of the above

CHECKLIST : KEY

- Undeniably the only correct answer?
- Are letters corresponding to the key equally distributed?
- Is key to an item provided by data in another item?
- Clues in keys: Synonyms?

Assembling a question paper with MCQs

Туре	Level	Time	Items	Marks	
				correct	wrong
SBR	Recall	40 s	60%	+1	-0.33
Match				+1	-0.25
Compl.	Inter-	50-70 s	30%	+1	0
Ind.TF	pretation			+0.25	-0.25
RA	Problem	50-90s	10%	+1	0
СН	Solving			+1	0

MCQ by participant

- In _____ poisoning the viscera is preserved by saturated salt solution
- a) Carbolic acid
- b) Engraver's acid
- c) Muratic acid
- d) Oxalic acid

MCQ by participant

Route of administration of BCG vaccine is -

- a) Oral
- b) Intradermal
- c) Subcutaneous
- d) Intramuscular

Normal CSF Pressure is a) 80 - 100 mm Hg b) $80 - 100 \text{ mm H}_2\text{O}$ c) 70 - 180 mm Hg d) $70 - 180 \text{ mm H}_2\text{O}$

The first stage of Voluntary grasp is Ulnar Palmar a) True b) False

Which is a true statement

- a) Gestational age and fertilization age are synonymous
- b) Gestational age is always greater than fertilization age
- c) Fertilization age is always greater than gestational age
- d) Gestational age and fertilization age can be of same duration

In case of an L5 Root compression the following nerve/nerves is/are compressed:

A] Sciatic NerveB] Radial NerveC] Popliteal NerveD] Femoral Nerve

Forearm muscles include all the following Except
(1) ERCB
(2) FCU
(3) Deltoid
(4) ERCL

Scabies is caused due to
(1) Scaboma mite
(2) Sarcoptus scabi
(3) Pediculg capitis
(4) None of the above

MCQS BY PARTICIPANTS (old) 1. Decide the right response to submaximal exercise in healthy adult

 \rightarrow \uparrow BP \rightarrow no change $\rightarrow \downarrow$ BP \rightarrow all of the above

2. Bombay blood group
a) is due to lack of H antigen
b) is due to lack of A antigen
c) is due to lack of B antigen
d) none of the above

- 1. What increas the incidence of heart d'se <u>except</u>
- 1) DM + HT
- 2) TB
- 3) Hand injuries
- 4) Typhoid
- 2. Function test studies in the renal disease
- a) PFT
- b) RFT
- c) LFT
- d) GFT

Double based questions

- Which of the following two statements are correct
- A) Local anaesthetics acts through receptors
- B) Bepredol is a calcium channel blocker
- C) Methyseride is used in angina pectoris
- D) Lidocaine is not used in cardiac arrythmias

Fill in the blanks

All the muscles of the larynx are supplied by ______nerve except _____muscle

- 1. In which of these conditions MTP indicated
- 1) MS of mother
- 2) Genetic disorders
- 3) Drug's taken by mother which are contraindicated in pregnancy
- 4) Malformations

Choose the correct one

a) 1, 2, 3 b) 3, 2, 1 c) 3, 4, 1 d) 1, 2, 3, 4

Identify the Odd One Outa) Rotib) Parathac) Nand) Puri

H.O.D. of Physioth. School & Centre; KEM is
(a) Amita Mehta
(b) Bhavna Mhatre
(c) Maria Jiandani
(d) Students of Physiotherapy

Thank you