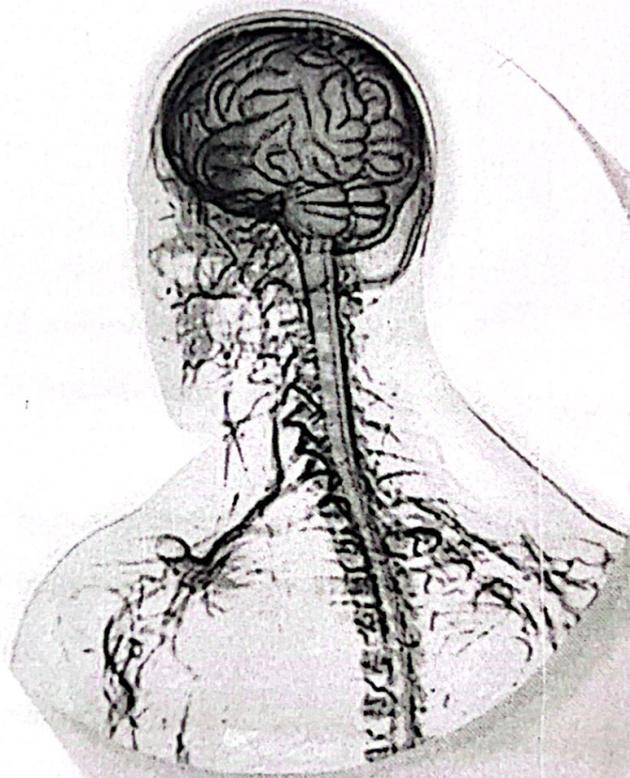


MCQ Physio

CNS



L 11

DR.M M

Written Q

1. Enumerate function of hypothalamus?
2. Mention effect of hypothalamus in regulation of blood glucose , endocrine function , circadian rhythm ?
3. Enumerate functions of limbic system?
4. Mention role of limbic system in fear and rage , reward and punishment , learning and memory ?

Formative MCQ

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| <p>1. The posterior hypothalamic nuclei include: <i>مش عندكم بس اعرفها</i></p> <ol style="list-style-type: none">a) Paraventricular nuclei.b) Preoptic nuclei.c) Mamillary body.d) Supraoptic nuclei.e) Periventricular nuclei. | C |
| <p>2. Hypothalamic regulation of autonomic nervous system:</p> <ol style="list-style-type: none">a) Stimulation of posterior hypothalamic area produces pupillary constriction.b) Stimulation of anterior hypothalamic area increases the heart rate.c) Stimulation of anterior hypothalamic area increases adrenaline secretion from suprarenal medulla.d) Stimulation of posterior hypothalamic area produces parasympathetic effects.e) Stimulation of posterior hypothalamic area produces increase blood pressure | E |

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| <p>3. Hypothalamic factor that inhibits anterior pituitary prolactin secretion?</p> <ul style="list-style-type: none"> a) Thyrotropin. b) Somatostatin. c) Dopamine. d) Gonadotropin e) Corticotropin. | C |
| <p>4. Which part of the limbic system concerned with Control of the feeding behaviour:</p> <ul style="list-style-type: none"> a) Cingulate gyrus. b) Amygdaloid nuclei. c) Hippocampus. d) Pyriform area and uncus. e) Mamillo-thalamic tract. | B |
| <p>5. Which of the following part of hypothalamus act as satiety centre:</p> <ul style="list-style-type: none"> a) Paraventricular b) Mammillary body c) Preoptic d) Lateral e) Ventromedial | E |
| <p>6. Bilateral lesion involving the ventromedial hypothalamus will lead to which of the following deficits?</p> <ul style="list-style-type: none"> a) Pleasure and satisfaction. b) Loss of sexual drive c) Excessive eating and drinking. d) Uterine contractility. e) Failure of heat loss mechanism | C |

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| <p>7. Signals from motor areas of the cortex reach the contralateral cerebellum after first passing through which one of the following structures?</p> <p>a) Thalamus. b) Caudate nucleus. c) Red nucleus. d) Basis pontine nuclei. e) Dorsal column nuclei</p> | <p>D</p> |
| <p>8. The term limbic cortex includes the orbitofrontal cortex, subcallosal gyrus, cingulated gyrus and which one of the following areas?</p> <p>a) Supplementary motor cortex. b) Postcentral gyrus c) Lingual gyres d) Parahippocampal gyrus. e) Paracentral lobule.</p> | <p>D</p> |
| <p>9. The hypothalamus protects the body against hypoglycemia by :</p> <p>a- inhibiting insulin release b- increasing glucagon release c- increasing thyroxin release d- increasing epinephrine release</p> | <p>D</p> |
| <p>10. The hypothalamic nucleus that act as a biological clock of the body is :</p> <p>a- supraoptic nucleus b- preoptic nucleus c- arcuate nucleus d- suprachiasmatic nucleus</p> | <p>D</p> |
| <p>11. Which structure connects the hippocampus to the limbic system?</p> <p>a) Mamillothalamic tract. b) Fornix. c) Anterior commissure. d) Medial forebrain bundle. e) Arcuate fasciculus.</p> | <p>B</p> |

Other MCQ

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| <p>1. The role of the limbic system in control of emotional behavior involves all the following, except:</p> <ul style="list-style-type: none">a) Homeostasisb) Somatic motor responsesc) Consolidation of memoryd) Generalized sympathetic stimulation | C |
| <p>2. The limbic system consists of the following except:</p> <ul style="list-style-type: none">a) Cingulate gyrusb) Hippocampusc) Subcallosalgyrusd) Caudate nucleus | D |
| <p>3. Selective damage of lateral hypothalamic area is likely to cause:</p> <ul style="list-style-type: none">a) overeatingb) Anorexiac) Raged) Diabetes insipiduse) Atonia | B |
| <p>4. The main limbic center involved during environmental threats to evoke fear and rage reactions:</p> <ul style="list-style-type: none">a) Hippocampus.b) Para-hippocampal gyrus.c) Mammillary body.d) Amygdala.e) Pyriform area and uncus. | D |

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| <p>5. The hypothalamic ventromedial nucleus seems to be concerned with:</p> <ul style="list-style-type: none"> a) Aggressive behavior b) Feeding c) Satiety and placidity d) Secretion of hormones e) Defense reactions | C |
| <p>6. The neurons of the hypothalamic preoptic area:</p> <ul style="list-style-type: none"> a) Are present in the posterior part of the hypothalamus b) Need insulin for glucose utilization c) Are selexcitable to regulate the serum Na level d) Are inhibited when the plasma osmolarity exceeds 300 m.osm/ litre e) Are activated by a decrease of impulses from the baroreceptors | E |
| <p>7. About the ventromedial hypothalamic nucleus, all the following is true except:</p> <ul style="list-style-type: none"> a) It contains the rage and feeding centers b) Its damage results in extreme obesity c) It contains glycosecretory d) Its damage causes a rage behavior e) It is one of the largest hypothalamic nuclei that contains both satiety and placidity centers | A |
| <p>8. Inhibition of the fear response is often seen in lesions involving the:</p> <ul style="list-style-type: none"> a) Septal nuclei b) Olfactory bulbs c) Cortical sensory areas d) Amygdaloid nuclei e) Thalamus | D |

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| <p>9. All the following are function of the limbic system except:</p> <ul style="list-style-type: none"> a) Feeding behavior b) Gustation c) Olfaction d) Fear and rage e) Sexual behavior | <p>B</p> |
| <p>10. The posterior and lateral hypothalamus, in combination with the preoptic area, are involved in the control of which of the following functions?</p> <ul style="list-style-type: none"> a) Cardiovascular functions involving blood pressure and heart rate b) Regulation of thirst and water intake c) Stimulation of uterine contractility and milk ejection from the breast d) Signaling that food intake is sufficient (satiety) | <p>A</p> |
| <p>11. Stimulation of the punishment center can inhibit the reward center, demonstrating that fear and punishment can take and reward. Which of the following cell groups is considered the punishment center?</p> <ul style="list-style-type: none"> a) Lateral and ventromedial hypothalamic nuclei b) Periventricular hypothalamus and midbrain center gray c) Supraoptic nuclei of hypothalamus d) Anterior hypothalamic nucleus | <p>B</p> |
| <p>12. Hypothalamic regulation of autonomic nervous system:</p> <ul style="list-style-type: none"> a) Stimulation of posterior hypothalamus produces pupillary constriction. b) Stimulation of anterior hypothalamic area increases the heart rate. c) Stimulation of anterior hypothalamic area increase adrenaline secretion from suprarenal medulla. d) Stimulation of posterior hypothalamic produces parasympathetic effects. e) Stimulation of posterior hypothalamus produces increase bl. pressure. | <p>E</p> |

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| <p>13. Stimulation of certain areas in limbic system and hypothalamus produces reward effect as:</p> <ul style="list-style-type: none"> a) Periventricular nucleus. b) Ventromedial nuclei of hypothalamus. c) Mamillo-thalamic tract. d) Pyriform area and uncus. e) Para-hippocampal gyrus. | B |
| <p>14. Bilateral damage of amygdala produces the following effect:</p> <ul style="list-style-type: none"> a) Pleasure and satisfaction (reward effect). b) Hyperphagia and hypersexuality. c) Punishment effect (displeasure, escape, fear and rage). d) Transformation of short-term memory into long-term memory. e) Loss of interest in other sex. | B |
| <p>15. The major output pathway for the limbic system:</p> <ul style="list-style-type: none"> a) Hippocampus. b) Para-hippocampal gyrus. c) Mamillo-thalamic tract. d) The hypothalamus and the amygdala. e) Pyriform area and uncus. | D |
| <p>16. Regarding the structure of the papez circuit within the limbic system:</p> <ul style="list-style-type: none"> a) Stria-terminalis connects the amygdaloid with the hypothalamus. b) Mamillo-thalamic tract connect the mamillary bodies to hippocampus. c) The hippocampus connected to mamillary bodies through the fornix. d) Stria-terminalis connects cingulated gyrus, to the hippocampus again e) Anterior thalamic nucleus connected to the amygdala through Mamillo-thalamic tract. | C |

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| <p>17. Which of the following part of the hypothalamus act as feeding center:</p> <ul style="list-style-type: none"> a) Paraventricular nuclei. b) Lateral hypothalamic nuclei. c) Preoptic nuclei. d) Ventromedial nuclei. e) Mamillary body. | B |
| <p>18. Which of the following part of the hypothalamus act as the biological clock of the body responsible for circadian rhythm:</p> <ul style="list-style-type: none"> a) Mamillary body. b) Ventromedial nucleus. c) Paraventricular nucleus. d) Lateral hypothalamic area. e) Supra-chiasmatic nucleus. | E |
| <p>19. Stimulation of certain areas in limbic system and hypothalamus produces punishment effect (displeasure, rage, fear and escape) as:</p> <ul style="list-style-type: none"> a) Ventromedial nuclei of hypothalamus. b) Lateral nuclei of hypothalamus. c) Periventricular nucleus. d) Amygdala. E) Septal nuclei. | C |
| <p>20. The hypothalamic functions:</p> <ul style="list-style-type: none"> a) Stimulation of ventromedial nuclei of the hypothalamus evokes eating behavior. b) Lesion of ventromedial nuclei of the hypothalamus produces Lack of desire for food (anorexia). c) Stimulation of posterior hypothalamic area increase sweat secretion. d) Lesion of anterior hypothalamic area leads to increase body temperature (Hyperthermia). e) Stimulation of anterior hypothalamus leads to increase ms tone,shivering. | D |

23. Which structure connects the hippocampus to the limbic system? مش عنكم

- a) Mammillothalamic tract
- b) Fornix
- c) Anterior commissure
- d) Medial forebrain bundle

B

21. Which structure is an important pathway for communication between the limbic system and the brainstem? مش عنكم بس اعرفها

- a) Mammillo-thalamic tract
- b) Fornix
- c) Anterior commissure
- d) Indusiumgriseum
- e) Medial forebrain bundle

E

22. Stimulation of which of the following subcortical areas can lead to contraction of a single muscle or small group muscles? مش عنكم بس اعرفها

- a) Dentate nucleus of the cerebellum
- b) Red nucleus
- c) Subthalamic nucleus
- d) Nucleus accumbens

C