Part (1): Select the single most appropriate answer (10 marks)

1. Regarding the fixators, they:
   A. Antagonize the action of the muscle.
   B. Steady the proximal joint during the action of the distal joint.
   C. Initiate particular movements.
   D. Movements against gravity.
   E. None of the above.

2. Which of the following circulations connects two sets of blood capillaries?
   A. Systemic.
   B. Portal.
   C. Pulmonary.
   D. All of the above.
   E. None of the above.

3. Regarding the retinacula, they:
   A. Are tight sheets of deep fascia around the muscles of limbs and neck.
   B. Are partitions of deep fascia separating groups of muscles.
   C. Are transverse thickenings of deep fascia around the wrist and ankle.
   D. Are strong sheathes of deep fascia investing large vessels and nerves.
   E. Are strong bands of superficial fascia giving attachments to muscles.

4. Regarding the types of the joints of the upper limb, mark one False statement
   A. The elbow joint is synovial hinge joint.
   B. The carpometacarpal joint of the thumb is synovial saddle.
   C. The superior radioulnar joints are synovial pivot.
   D. The wrist joint is synovial saddle.
   E. The latissimus dorsi is attached to the humerus.
5. Regarding profunda brachii artery, mark the wrong answer:
   A. Passes with the radial nerve in the spiral groove.
   B. Descends between medial and long heads of triceps.
   C. It supplies triceps muscle.
   D. Arises from third part of axillary artery.
   E. It ends by giving radial collateral artery.

6. Regarding the interosseous membrane, mark the wrong answer:
   A. Is attached to the interosseous borders of radius and ulna.
   B. Its fibers pass downward and laterally.
   C. Gives origin to the deep flexors of the hand.
   D. Transmits the weight of upper limb from radius to ulna.
   E. Pierced by anterior interosseous vessels.

7. Regarding the principal muscles concerned in extension of the shoulder joint, mark the wrong answer:
   A. Posterior fibers of deltoid.
   B. Teres major muscle.
   C. Latissimus dorsi.
   D. Serratus anterior.
   E. Sternocostal head of pectoralis major; of flexed arm.

8. Regarding the subscapular artery, mark the wrong statement:
   A. Arises from the third part of axillary artery.
   B. Gives the posterior circumflex humeral artery.
   C. Shares in anastomoses around scapula.
   D. Gives circumflex scapular artery.
   E. Terminates as thoracodorsal artery.

9. The deformity caused by Erb's paralysis is called:
   A. Winging of the scapula.
   B. Ape hand.
   C. Policeman's tip position.
   D. Wrist drop.
   E. Claw hand.

10. Regarding the superior thoracic artery, mark the wrong answer:
    A. Arises from the first part of axillary artery.
    B. Arises behind the subclavus muscle.
    C. Descends on the medial wall of axilla.
    D. Pierces the clavipectoral fascia.
    E. Anastomoses with the intercostal arteries.
11. Regarding the interphalangeal joints of the medial 4 fingers, mark the incorrect answer:
A. All are synovial.
B. All are uniaxial (hinge) allow flexion and extension.
C. Flexion of distal interphalangeal joints is by flexor digitorum superficialis.
D. Flexion of proximal interphalangeal joints is by flexor digitorum superficialis and profundus.
E. Extended by lumbricals, interossei and extensor digitorum longus.

12. Regarding gastrulation, mark one correct statement:
A. It means formation of the bilaminar germ disk.
B. It means formation of the three germ layers.
C. It means formation of the yolk sac and amniotic cavity.
D. It means formation of the extraembryonic mesoderm.
E. It occurs during the 2nd week of development.

13. One of the following structures is not a constituent of tertiary chorionic villus:
A. Cytotrophoblast.
B. Syncytiotrophoblast.
C. Extraembryonic mesoderm.
D. Extraembryonic coelom.
E. Blood capillaries.

14. Regarding the folding of the embryonic disc, mark one False statement:
A. Only cephalic & caudal parts of the embryonic area are involved in folding.
B. The cephalic fold causes reversal of position of heart and pericardium.
C. The cephalic fold encloses part of the yolk sac, which forms foregut.
D. The caudal fold encloses part of the yolk sac, which forms hindgut.
E. The caudal folding of the embryo brings the connecting stalk ventrally.

15. Which one of the following structures is a mesodermal derivative:
A. Intestinal mucosa.
B. Brain.
C. Striated muscle.
D. Thymus gland.
E. Epidermis of the skin.

16. The coronary sulcus contains all of the following, mark the False one:
A. Right coronary artery
B. Circumflex branch of left coronary artery
C. Great cardiac vein
D. Middle cardiac vein
E. Coronary sinus.
17. At the level of the sternal angle the following features are present, EXCEPT:
   A. The second rib articulates with sternum,
   B. The beginning of the superior vena cava.
   C. The trachea bifurcates,
   D. The termination of the arch of the aorta,
   E. The beginning of the arch of aorta.

18. Structure passing posterior to the root of the right lung?
   A. Hemiazygos vein
   B. Right phrenic nerve
   C. Right vagus nerve
   D. Thoracic aorta
   E. Right recurrent laryngeal nerve

19. A stab wound through the thoracic wall deep to the fourth intercostals space on the right side of the sternum would first puncture the ....
   A. Superior vena cava
   B. Right brachiocephalic vein
   C. Left brachiocephalic vein
   D. Brachiocephalic trunk
   E. Right atrium

20. All the following statements are correct about the distribution of the coronary artery, EXCEPT:
   A. The infundibulum of the right ventricle is supplied by right and left coronary arteries
   B. The AV node is supplied by the right coronary artery
   C. The right marginal artery originates from right coronary artery
   D. The septal branch of left coronary artery supplies the posterior third of the interventricular septum
   E. The circumflex branch is the continuation of the coronary artery in the coronary groove
Part (2): Identify the labeled landmarks (5 marks)
Part (3): Complete  (10 marks)

1. Skin appendages include .........., ..........., ........... and ............

2. Patella is an example of ........ bone.

3. All parts of the body have lymphatics except the ........, ........, ........ and ...........

4. After implantation, the decidua becomes divided into 3 parts: decidua .........., decidua ........... and decidua ............

5. Each somite differentiates into a dorsolateral part called ................ and a ventromedial part called ................................

6. After folding, the part of the secondary yolk sac enclosed within the embryo is called ............ and the remaining part is called ................

7. The placenta is formed from .......... and ............

8. The fourth compartment, deep to the extensor retinaculum transmits the tendons of ..........., and ............

9. Upward rotation of the glenoid cavity can be done by ........... and ............

10. The upper lateral cutaneous nerve of the arm is a branch of .........., while the lower lateral cutaneous nerve of the arm is a branch of ............

11. All the interossei muscles are supplied by ..........., while the lumbricals are supplied by ..........., and ............

12. The rotator cuff muscles are ..........., ..........., ..........., and ............

13. The posterior interosseous nerve supplies all the muscles of the back of the forearm except ........, ........ and ........ which are supplied by the main trunk of ........ nerve.

14. The ulnar artery shares in the anastomosis around the elbow by ..........., and ..........., while the radial artery shares in the anastomosis around the elbow by ..........., and ............

15. Carpal tunnel syndrome results from compression of the ........ nerve while passing through the carpal tunnel. The resulting deformity is called ............

16. The head of 5th rib articulates with bodies of ........ and ........ thoracic vertebrae.

17. Terminal branches of internal thoracic artery are ..........., and ............

18. Pleural recesses include ............. and ............

19. Horizontal fissure of Rt lung start at ............, meet the oblique fissure in the ............

20. Oblique sinus of pericardium is related anteriorly to ............