

Report to give you last few weeks section has been

**DIRECTOR OF HEALTH, MEDICAL SERVICES & MEDICAL EDUCATION
GUJARAT STATE
26TH LABORATORY & X-RAY TECHNICIANS TRAINING COURSE EXAMINATION
PHYSIOLOGY**

2014

Instructions: 1. Figure to the right indicates marks of each question.
2. Draw diagrams wherever necessary.

Date: 13/08/2014

Time: 2 hours

TOTAL MARKS: 50

Q. 1 (A) Answer any five of the following: 15

1. What are the uses of Neubauer's chamber?
2. What is the significance of differential leucocyte count (DLC)?
3. What are the functions of haemoglobin?
4. Why is cedar wood oil used with oil immersion objective lens?
5. What precautions should be taken to prevent infection during venepuncture and skin pricking?
6. How will you clean a RBC pipette when blood has clotted in the stem?
7. Draw the diagram of normal electrocardiogram (ECG) showing the various waves & segments.

(B) Match the following: 05

- | | |
|------------------|----------------------------------|
| B 1. Sarcomere | a. Cerebral cortex |
| D 2. Spirometer | b. Muscle |
| A 3. Memory | c. Gastro intestinal tract (GIT) |
| E 4. Oxytocin | d. Vital capacity |
| C 5. Peristalsis | e. Pituitary gland |

Q. 2 (A) Write short notes on any three: 15

1. Functions of kidney - 173 ✓
2. Functions of liver - 124 ✓
3. Functions of testis - 223 ✓
4. Cardiac cycle ✓
5. Functions of respiratory system - 154 ✓

(B) Write true or false and correct it if it is not true 05

1. Heart is made up of smooth muscle. ✓
2. Gastric juice is highly acidic in nature. ✓
3. Ovulation occurs around the 14th day of normal menstrual cycle. ✓
4. Bleeding time is prolonged but clotting remains normal in hemophilia. ✓
5. Mitochondria are the power house of cell. ✓

Q. 3 Fill in the blanks 10

1. Plasma proteins are Albumin & α - β - γ -Globulin.
2. Bile is secreted by liver & stored in gall bladder.
3. In cross matching donor RBCs are mixed with recipient serum.
4. Each respiratory act consists of Inspiration & Expiration.
5. The normal average heart rate at rest is about 72 / minute.
6. Adrenal gland consist of outer cortex & inner medulla.
7. Normal glomerular filtration rate is 125 ml/min.
8. Hormones secreted by ovary are oestrogen & progesterone.
9. rods & cones are receptors of eye.
10. Normal systolic blood pressure is 110-140 mm of Hg & diastolic blood pressure is 60-80 mm of Hg.

180 mmHg day
monocytes
neutrophils
eosinophils