

# **CELL BIOLOGY LECTURE 2 QUESTIONS**

### QUESTION 1: WHICH OF THE FOLLOWING IS MATCHED INCORRECTLY?

- a) Trypan blue = mast cells
- b) Leishman = blood films
- c) Trichrome = collagen fibers
- d) Silver stain = nerve cells

### **QUESTION 2: WHAT DOES IMMORTALIZED CELL LINE MEAN?**

- a) Primary culture of cells
- b) Cells that proliferate indefinitely
- c) Cells that are frozen to keep their shape

### QUESTION 3: MOST COMMONLY USED STAIN IN ELECTRON MICROSCOPY

- a) Hand E
- b) Trichrome stain
- c) Osmium tetroxide
- d) Immunohistochemical stain

### QUESTION 4: WHICH OF THE FOLLOWING IS TRUE ABOUT METACHROMATIC STAIN?

- a) Stains nerve cells brown
- b) Stain which gives the tissue a new colour different from the colour of the stain
- c) Stains elastic fibers browm

# QUESTION 5: THE TRUE ARRANGEMENT IN CENTRIFUGATION

- a) Ribosome, nucleus, microsomes, mitochondria
- b) Mitochondria, microsomes, nucleus, ribosomes
- c) Nucleus, mitochondria, microsomes, ribosomes

### QUESTION 6: FLUORESCENT IN SITU HYBRIDIZATION TECHNIQUE IS USED FOR?

- a) Isolating cell components
- b) Rapid technique for diagnosis of tumors
- c) Purify nucleic acid fragments
- d) Localize the site of the genes on chromosomes

### QUESTION 7: WHICH OF THE FOLLOWING SENTENCES IS TRUE?

- a) Hematoxylin= stains nucleus blue
- b) Freezing = useful for histochemical analysis
- c) A and B
- d) None of the above



### QUESTION 8: WHICH IS NOT TRUE REGARDING ROUTINE HISTOLOGICAL STAINS HAND E?

- a) Hematoxylin is blue dye
- b) Cytoplasmic RNA will attract hematoxylin
- c) Nucleus is basophilic
- d) Eosin is a red basic dye

# QUESTION 9: WHICH STAIN IS USED FOR NERVE CELLS STAINING?

- a) Silver
- b) Orcein
- c) Metachromatic stain
- d) Hand E

# QUESTION 10: THE TYPE OF CULTURING WHEN THE CELLS ARE DIRECTLY CULTURES FROM THE TISSUE IS?

- a) Primary culture
- b) Secondary culture
- c) Tertiary culture

### QUESTION 11: FIXATION IN ELECTRON MICROSCOPY IS DONE USING?

- a) Alcohol
- b) Glutaraldehyde + osmium tetroxide
- c) Formol saline

# QUESTION 12: WHAT PROCESS HELPS IN THE COAGULATION OF TISSUE AND FACILITATES SECTIONING?

- a) Dehydration
- b) Fixation
- c) Freezing
- d) Embedding

# QUESTION 13: IMMUNOHISTOCHEMICAL STAINS USES ANTIBODIES TO IDENTIFY WHICH OF THE FOLLOWING?

- a) Enzymes
- b) RNA sequences
- c) Staining techniques
- d) Antigens

# QUESTION 14: THE LIQUID AT THE TOP AFTER CENTRIFUGATION IS CALLED?

- a) Cytoplasm
- b) Medium
- c) Pellet
- d) Supernatant



# QUESTION 15: THE PROCESS OF REMOVING ALCOHOL AND MAKING TISSUE TRANSLUCENT IS CALLED?

- a) Dehydration
- b) Fixation
- c) Freezing
- d) Clearing

# QUESTION 16: WHAT ARE THE BASIC COMPONENTS OF THE CELLS OFTEN STAINED BY EOSIN?

- a) DNA and RNA
- b) Cytoplasm and mitochondria
- c) Nucleus and ribosomes