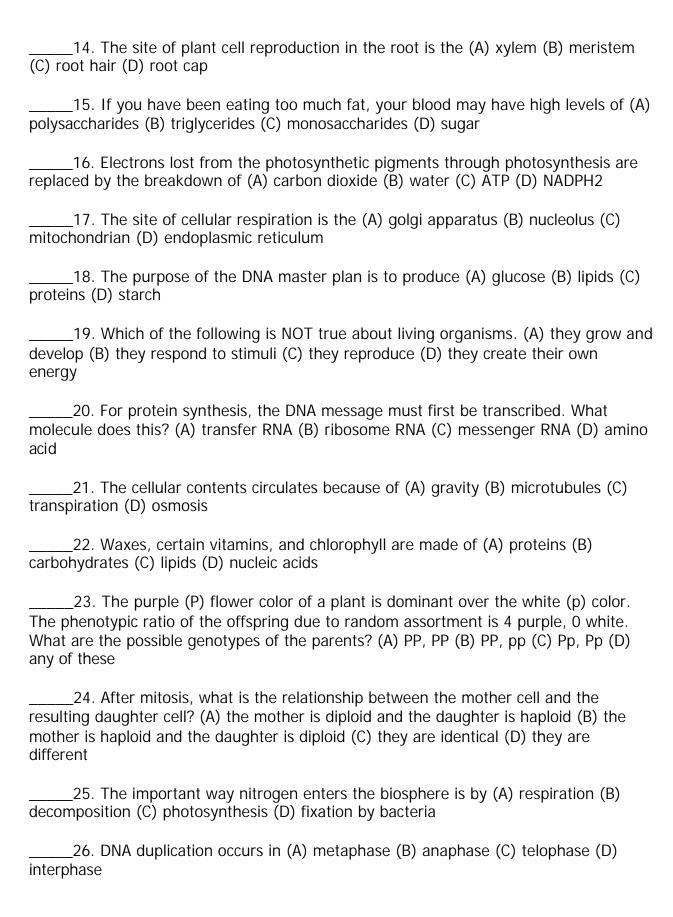
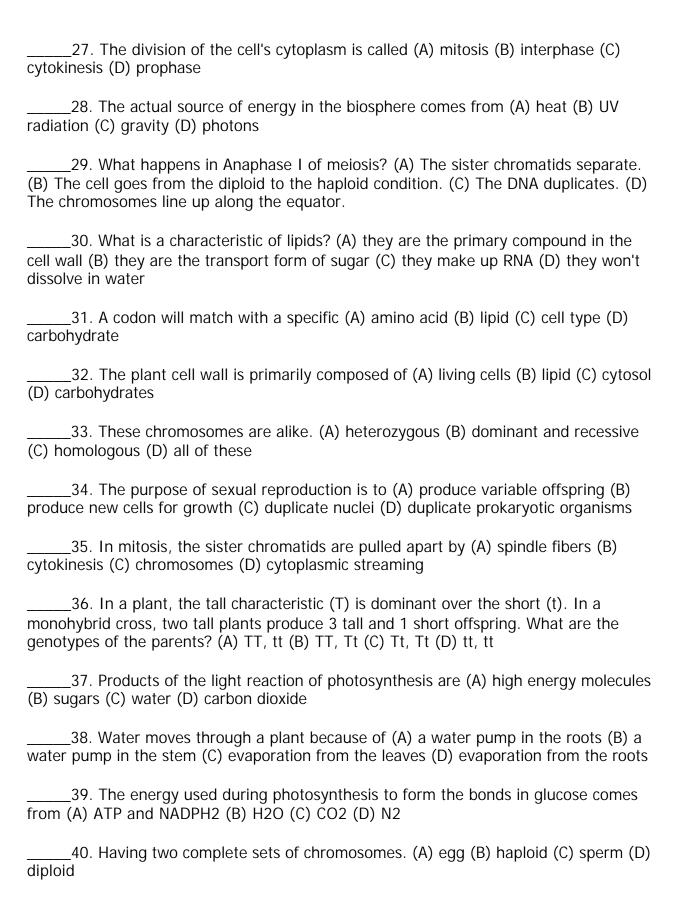
## BSCI 124 – Unit I sample exam questions

There are fifty questions - each worth two points. Multiple choice - Record the best answer. Record your answers in the blank spaces to the left of the question number using CAPITAL letters.

1. Science is different from art, philosophy, and religion because scientific principles are (A) always correct (B) verified (C) biased (D) filled with emotion
2. One way carbon leaves the biosphere is by (A) photosynthesis (B) fixation (C) respiration (D) all of these
3. Prokaryotic cells lack (A) a plasma membrane (B) DNA (C) organelles (D) cytosol
4. In most plants, the primary organ for photosynthesis is the (A) leaf (B) stem (C) root (D) wood
5. When discussing the energy flow and food chains, what is an example of a producer? (A) lions (B) the earth (C) cows (D) grass
6. This organelle stores compounds that may include sugars, salts, or pigments. (A) golgi apparatus (B) endoplasmic reticulum (C) nucleus (D) vacuole
7. The purpose of meiosis it to produce (A) growth (B) epidermal cells (C) gametes (D) xylem
8. Bones support animals. What supports plants? (A) cell walls (B) muscles (C) also bones (D) plasma membranes
9. Which of the following is NOT a component of a nucleotide (A) phosphate (B) lipid (C) sugar (D) organic base
10. The major site of protein synthesis is the (A) nucleolus (B) ribosome (C) plasma membrane (D) chloroplast
11. The biosphere includes (A) the atmosphere (B) the oceans (C) the organisms (D) all of these
12. Carbohydrates have a lot of energy because they have a lot of (A) carbon-hydrogen bonds (B) glycerol (C) phosphate atoms (D) oil
13. Science can best be described as (A) a technique (B) all knowledge (C) not using data (D) lacking experimentation





dominant (C) a tall pea plant (D) recessive		
42. With incomplete dominance, when a red flowered plant is crossed with a white flowered plant, the offspring will be (A) red (B) pink (C) white (D) all of these		
43. In respiration, the energy from sugar molecules is transferred to (A) photosynthetic pigments (B) ATP (C) carbon dioxide (D) oxygen		
44. If a photon's wavelength is increased, its energy will (A) increase (B) stay the same (C) decrease (D) all of these		
Matching - match the plan	nt structure with its primary function (use capital letters)	
45. Stomates	A. protective tissue	
46. Cuticle	B. food transport	
47. Phloem	C. gas exchange	
48. Epidermis	D. storage	
49. Cortex	E. water transport	
50. Xylem	F. prevents excessive evaporation	
ANCWEDS: 1 D 2 C 2 C	4 A 5 D 6 D 7 C 0 A 0 D 10 D 11 C 12 A 12 A 14 D	

ANSWERS: 1-B, 2-C, 3-C, 4-A, 5-D, 6-D, 7-C, 8-A, 9-B, 10-B, 11-C, 12-A, 13-A, 14-B, 15-B, 16-B, 17-C, 18-C, 19-D, 20-C, 21-B, 22-C, 23-D (see note below), 24-C, 25-D, 26-D, 27-C, 28-D, 29-B, 30-D, 31-A, 32-D, 33-C, 34-A, 35-A, 36-C, 37-A, 38-C, 39-A, 40-D, 41-D, 42-B, 43-B, 44-C, 45-C, 46-F, 47-B, 48-A, 49-D, 50-E

Question 23 -descriptions of possible answers: answer A - all offspring PP, purple; answer B - all offspring Pp, purple; answer C - typical offspring ratio is PP, 2Pp, pp or 3 purple to 1 white based on probabilities - but random assortment could also produce offspring that are 2 purple and 2 white, 1 purple and 3 white, all purple, or all white. Therefore, the correct answer to this question is D - any of these.