- 1-mismatching: serotonin-threonine
- 2-wrong about PKU: deficiency of PKU carboxylase
- 3-true about conversion Mono to Di: base specific Mono the general Di
- 4-lesch-nyhan syndrome : deficiency of HGPRT
- 5-hydroxyurea & RR: inhibit thus treatment of leukemia cancer
- 6-wrong about purine degradation: nucleosidases remove phosphate group
- 7-true about gout: urate crystals in joints
- 8-wrong about porphyrins synthesis: Fe addition by ferrochelatase (it just enhance spontaneous adding)
- 9-true about heme degradation: conjugation to glucuronic acid to increase solubility
- 10-true about Jaundice: newborns have deficiency of glucuronyltransferase
- 11-wrong about MOE: it's the only enzyme in catecholamines degradation
- 12- mismatching: purine-ribose adding lately // pyrimidine-ribose adding firstly
- 13-WRONG about purine degradation pathway? Purine degradation results in beta alanine & beta hydroxybutyrate
- 14-True about methionine >> can be regenerated from homocysteine in the presence of B12
- 15-True about pancreatic lipase? Deficiency affect el degradation not absorption
- 16-Non-essential AA..??
- 17-True about salvage pathway >> GLY can be synthesized from serine and THF will be the hydroxyethyl acceptor
- 18-All are inhibitors of purines and pyrimidine Synthesis Except >> PRPP

- 19-Deficiency of cystathionine synthase diagnosis >> homocystinurea
- 20-True about folate 1. It is active form is THF 2. C5 and /or C10 r the methyl carriers
- 21-True statement proline, Leu, isoleucine are derived from keto acids?
- 22-Conversion from glutamate to glutamine what is the wrong statement? It affects el conversions from Glu to alpha ketoglutarate
- 23-wrong about ubiquitin-proteasome pathway: both ubiquitin & target protein are degraded.
- 24-true about protein degradation & absorption: AA's are absorbed into portal system
- 25-wrong about urea cycle: happens in mitochondria
- 26-mismatching: serine-Glu-ketogenic
- 27-something true about folic acid: THF is the activated form
- 28-something true about nonessential AA's: Gly from Ser & THF accepts (C-OH)
- 29-activator for both purine & pyrimidine synthesis: PRPP
- 30-Mismatch pairs, each AA with its precursor:
- A. Tyrosine melanin
- B. Tyrosine norepinephrine
- C. Threonine -serotonin
- D.histidine -histamine
- E. arginine and glycine, creatine

Answer C