

DU MSc Food and Nutrition

Topic:- DU_J18_MSC_FN_Topic01

1) If the requirement of Vitamin A expressed as Beta carotene is 4800 µg, its retinol equivalent will be [Question ID = 4527]

1. 400 µg [Option ID = 18105]
2. 800 µg [Option ID = 18108]
3. 600 µg [Option ID = 18107]
4. 1200 µg [Option ID = 18106]

Correct Answer :-

- 600 µg [Option ID = 18107]

2) Triticale is a hybrid cereal from a cross between [Question ID = 4555]

1. wheat and ragi [Option ID = 18220]
2. wheat and rice [Option ID = 18219]
3. wheat and rye [Option ID = 18218]
4. wheat and maze [Option ID = 18217]

Correct Answer :-

- wheat and rye [Option ID = 18218]

3) Which of the following hormones controls a hyperglycemic state

[Question ID = 4505]

1. Cortisol [Option ID = 18020]
2. Glucagon [Option ID = 18017]
3. Epinephrine [Option ID = 18018]
4. Insulin [Option ID = 18019]

Correct Answer :-

- Insulin [Option ID = 18019]

4) Which of the following is not a non-caloric sweetener?

[Question ID = 4546]

1. Saccharin [Option ID = 18181]
2. Honey [Option ID = 18184]
3. Stevia [Option ID = 18183]
4. Aspartame [Option ID = 18182]

Correct Answer :-

- Honey [Option ID = 18184]

5) Glycogen phosphorylase is specific for [Question ID = 4465]

1. α 1-6 glycosidic linkage [Option ID = 17857]
2. α 1-4 glycosidic linkage [Option ID = 17858]
3. β 1-6 glycosidic linkage [Option ID = 17859]
4. β 1-6 glycosidic linkage [Option ID = 17860]

Correct Answer :-

- α 1-4 glycosidic linkage [Option ID = 17858]

6) Following are the criteria for diagnosis of metabolic syndrome:

- i. Abdominal obesity
- ii. Fasting blood sugar < 100 mg/dl
- iii. Elevated blood pressure
- iv. High HDL cholesterol level
- v. High LDL cholesterol level

[Question ID = 4519]

1. Correct options are i , iii, iv [Option ID = 18073]
2. Correct options are ii, iii, &v [Option ID = 18076]
3. Correct options are i, ii & iii [Option ID = 18074]
4. Correct options are i, iii & v [Option ID = 18075]

Correct Answer :-

- Correct options are i, iii & v [Option ID = 18075]

7) The active principal in garlic is [Question ID = 4537]

1. Eugenol [Option ID = 18145]
2. Capsaicin [Option ID = 18146]
3. Gingerol [Option ID = 18147]
4. Allicin [Option ID = 18148]

Correct Answer :-

- Allicin [Option ID = 18148]

8) Which foods come under the category of protective and regulatory food group? [Question ID = 4551]

1. Sugar and products [Option ID = 18203]
2. Pulses and Legumes [Option ID = 18201]
3. Cereals and products [Option ID = 18204]
4. Vegetables and Fruits [Option ID = 18202]

Correct Answer :-

- Vegetables and Fruits [Option ID = 18202]

9) Most allosteric enzymes [Question ID = 4472]

1. Show only homotropic interactions [Option ID = 17886]
2. Bind allosteric effectors with no effect on binding with other ligands [Option ID = 17887]
3. Have more than one subunit [Option ID = 17888]
4. Are monomers [Option ID = 17885]

Correct Answer :-

- Have more than one subunit [Option ID = 17888]

10) The germ is separated from wheat kernels during milling because [Question ID = 4543]

1. Rancidity of germ fat may result in less shelf life [Option ID = 18171]
2. All of these [Option ID = 18172]
3. Its a valuable by-product [Option ID = 18169]
4. Germ oil can be prepared [Option ID = 18170]

Correct Answer :-

- All of these [Option ID = 18172]

11) Indicator of iron deficiency anaemia for pregnant women is [Question ID = 4508]

1. Haemoglobin <11g/100ml> [Option ID = 18030]
2. Haemoglobin <13g/100ml> [Option ID = 18029]
3. Haemoglobin <16g/100ml> [Option ID = 18032]
4. Haemoglobin <15g/100ml> [Option ID = 18031]

Correct Answer :-

- Haemoglobin <11g/100ml> [Option ID = 18030]

12) Indicate the odd one out [Question ID = 4544]

1. Saponin [Option ID = 18174]
2. Lycopene [Option ID = 18173]
3. Xanthophyll [Option ID = 18175]
4. Chlorophyll [Option ID = 18176]

Correct Answer :-

- Saponin [Option ID = 18174]

13) A reaction between an aldehyde and an alcohol gives a [Question ID = 4491]

1. none of these [Option ID = 17964]
2. hemiacetal [Option ID = 17962]
3. lactone [Option ID = 17961]
4. hemiketal [Option ID = 17963]

Correct Answer :-

- hemiacetal [Option ID = 17962]

14) Process of redistribution of fatty acids within the triglyceride structure is known as

[Question ID = 4557]

1. Winterization [Option ID = 18225]
2. Hydrogenation [Option ID = 18226]
3. Interesterification [Option ID = 18227]
4. Fractionation [Option ID = 18228]

Correct Answer :-

- Interesterification [Option ID = 18227]

15) Adding _____ to a breakfast of cereal will help your body to absorb iron. [Question ID = 4468]

1. milk [Option ID = 17869]
2. orange juice [Option ID = 17870]
3. coffee [Option ID = 17871]
4. water [Option ID = 17872]

Correct Answer :-

- orange juice [Option ID = 17870]

16) Iron-containing oxygen binding storage protein is [Question ID = 4500]

1. All of these [Option ID = 18000]
2. Myoglobin [Option ID = 17998]
3. Oxyhaemoglobin [Option ID = 17997]
4. Haemoglobin [Option ID = 17999]

Correct Answer :-

- Myoglobin [Option ID = 17998]

17) A clear fluid diet cannot contain which of the following preparations [Question ID = 4518]

1. Black Tea [Option ID = 18070]
2. Carbonated beverages [Option ID = 18072]
3. Semolina porridge [Option ID = 18071]
4. Coconut Water [Option ID = 18069]

Correct Answer :-

- Semolina porridge [Option ID = 18071]

18) Normal Levels of Glycosylated Haemoglobin indicative of a non-diabetic state should be

[Question ID = 4526]

1. >10% [Option ID = 18102]
2. >6.5% [Option ID = 18104]
3. <10% [Option ID = 18101]
4. <6.5% [Option ID = 18103]

Correct Answer :-

- <6.5% [Option ID = 18103]

19) The key enzyme in the regulation of fatty acid synthesis is [Question ID = 4469]

1. acetyl CoA carboxylase [Option ID = 17873]
2. protein phosphatase [Option ID = 17875]
3. none of these [Option ID = 17876]

4. AMP activated proteinkinase [Option ID = 17874]

Correct Answer :-

- acetyl CoA carboxylase [Option ID = 17873]

20) Adulterant added to mustard oil is [Question ID = 4536]

1. Vanaspati [Option ID = 18141]
2. Argemone oil [Option ID = 18143]
3. HVO [Option ID = 18142]
4. Palm oil [Option ID = 18144]

Correct Answer :-

- Argemone oil [Option ID = 18143]

21) The blood clotting vitamin is [Question ID = 4498]

1. Vitamin D [Option ID = 17991]
2. Vitamin E [Option ID = 17990]
3. Vitamin A [Option ID = 17989]
4. Vitamin K [Option ID = 17992]

Correct Answer :-

- Vitamin K [Option ID = 17992]

22) The combination of gases used in MAP of food products is [Question ID = 4547]

1. Carbon dioxide, hydrogen and hexane [Option ID = 18188]
2. Oxygen, carbon dioxide and nitrogen [Option ID = 18186]
3. Hydrogen, oxygen and nitrogen [Option ID = 18185]
4. Hydrogen and nitrogen [Option ID = 18187]

Correct Answer :-

- Oxygen, carbon dioxide and nitrogen [Option ID = 18186]

23) The phosphoprotein which is precipitated from raw milk at pH 4.6 is [Question ID = 4545]

1. Albumin [Option ID = 18178]
2. Lactoglobulin [Option ID = 18180]
3. Lactalbumin [Option ID = 18179]
4. Casein [Option ID = 18177]

Correct Answer :-

- Casein [Option ID = 18177]

24) The photosensitive pigment produced in eyes by Rods and Cones are [Question ID = 4497]

1. Retinaldehyde and iodopsin [Option ID = 17988]
2. Rhodopsin and iodopsin [Option ID = 17987]
3. Rhodopsin and retinal [Option ID = 17986]
4. Rhodopsin and retinaldehyde [Option ID = 17985]

Correct Answer :-

- Rhodopsin and iodopsin [Option ID = 17987]

25) HIV associated wasting is when there is unintentional weight loss of [Question ID = 4522]

1. >25% in 30 days [Option ID = 18086]
2. >30% in 30 days [Option ID = 18088]
3. >35% in 30 days [Option ID = 18087]
4. >10% in 30 days [Option ID = 18085]

Correct Answer :-

- >10% in 30 days [Option ID = 18085]

26) Milk sugar lactose is a combination of which two mono-saccharides? [Question ID = 4493]

1. Glucose and Glucose [Option ID = 17971]
2. Glucose and Fructose [Option ID = 17969]
3. Glucose and Galactose [Option ID = 17972]

4. Fructose and Galactose [Option ID = 17970]

Correct Answer :-

- Glucose and Galactose [Option ID = 17972]

27) A diet high in Saturated Fat can be linked to which of the following [Question ID = 4502]

1. Cholera [Option ID = 18007]
2. Anorexia [Option ID = 18008]
3. Cardiovascular disease [Option ID = 18005]
4. Kidney Failure [Option ID = 18006]

Correct Answer :-

- Cardiovascular disease [Option ID = 18005]

28) All of the following statements are correct regarding BMR except [Question ID = 4531]

1. Men have higher BMR than age matched females [Option ID = 18124]
2. Higher the surface area, higher the BMR [Option ID = 18121]
3. BMR decreases in pregnancy [Option ID = 18122]
4. BMR decreases with advancing age in adults [Option ID = 18123]

Correct Answer :-

- BMR decreases in pregnancy [Option ID = 18122]

29) Which type of microbes are killed during pasteurization [Question ID = 4541]

1. Spores [Option ID = 18164]
2. Mainly bacteria [Option ID = 18163]
3. All microorganisms [Option ID = 18161]
4. All viruses [Option ID = 18162]

Correct Answer :-

- Mainly bacteria [Option ID = 18163]

30) Peyer's Patches are a symptom of [Question ID = 4524]

1. Typhoid [Option ID = 18093]
2. Tuberculosis [Option ID = 18095]
3. Infective Hepatitis [Option ID = 18096]
4. Peptic Ulcers [Option ID = 18094]

Correct Answer :-

- Typhoid [Option ID = 18093]

31) Angular stomatitis and glossitis are characteristic symptoms of deficiency of [Question ID = 4499]

1. Niacin [Option ID = 17995]
2. Folic acid [Option ID = 17996]
3. Thiamin [Option ID = 17993]
4. Riboflavin [Option ID = 17994]

Correct Answer :-

- Riboflavin [Option ID = 17994]

32) Parenteral Nutrition involves provision of nutritional support through [Question ID = 4520]

1. Mouth [Option ID = 18079]
2. Nose [Option ID = 18080]
3. Gastro Intestinal tract [Option ID = 18077]
4. Veins [Option ID = 18078]

Correct Answer :-

- Veins [Option ID = 18078]

**33) ISO stands for
[Question ID = 4553]**

1. Indian System for Standardization [Option ID = 18211]
2. International Order of Standardization [Option ID = 18210]
3. International Organization for Standardization [Option ID = 18209]
4. None of these [Option ID = 18212]

Correct Answer :-

- International Organization for Standardization [Option ID = 18209]

34) What is the correct sequence of product in urea cycle?

Ornithine

Arginine

Arginosuccinic acid

Urea

Citrulline

[Question ID = 4488]

1. 1,2,3,5,4 [Option ID = 17949]
2. 1,5,2,3,4 [Option ID = 17951]
3. 1,3,5,2,4 [Option ID = 17952]
4. 1,5,3,2,4 [Option ID = 17950]

Correct Answer :-

- 1,5,3,2,4 [Option ID = 17950]

35) All the following statements about allosteric effectors are correct except [Question ID = 4490]

1. may decrease the enzyme's affinity for its substrate [Option ID = 17958]
2. bind at the substrate binding site [Option ID = 17960]
3. may increase the enzyme's affinity for its substrate [Option ID = 17957]
4. cause a conformational change in enzyme [Option ID = 17959]

Correct Answer :-

- bind at the substrate binding site [Option ID = 17960]

36) Identify the terms associated with cereal cooking:

a. Gelation

b. Gelatinization

c. Scum formation

d. Scorching

e. Retrogradation

f. Coagulation

[Question ID = 4549]

1. b, c and d [Option ID = 18193]
2. e, b and f [Option ID = 18196]
3. e, d and b [Option ID = 18195]
4. a, b and e [Option ID = 18194]

Correct Answer :-

- a, b and e [Option ID = 18194]

37) The gelling ability of a starch depends upon [Question ID = 4560]

1. amylopectin content [Option ID = 18238]
2. All of these [Option ID = 18240]
3. amylose content [Option ID = 18237]
4. fat content [Option ID = 18239]

Correct Answer :-

- amylose content [Option ID = 18237]

38) Epiphyseal enlargement is seen during deficiency of which nutrient [Question ID = 4525]

1. Thiamine [Option ID = 18100]
2. Vitamin D [Option ID = 18098]
3. Vitamin C [Option ID = 18097]
4. Calcium [Option ID = 18099]

Correct Answer :-

- Vitamin D [Option ID = 18098]

39) Sequence of oral-motor development from birth to 24 months

(i) Rotatory chewing

(ii) Movement of food from side to side

(iii) Swallow

(iv) Rooting

[Question ID = 4528]

1. (iv), (iii), (ii), (i) [Option ID = 18109]
2. (iii), (iv), (ii), (i) [Option ID = 18110]
3. (iii), (ii), (i), (iv) [Option ID = 18112]
4. (ii), (iii), (iv), (i) [Option ID = 18111]

Correct Answer :-

- (iii), (iv), (ii), (i) [Option ID = 18110]

40) This reacts with lysine residue in opsin to form rhodopsin [Question ID = 4492]

1. 11-cis-retinal [Option ID = 17967]
2. 9-cis-retinoic acid [Option ID = 17968]
3. 11-cis retinol [Option ID = 17965]
4. all-trans-retinol [Option ID = 17966]

Correct Answer :-

- 11-cis-retinal [Option ID = 17967]

41) Cut off for severe acute malnutrition in children (6-60 months) as recommended by WHO (2009) are-

[Question ID = 4516]

1. Weight for height between $-3SD$ and $-2SD$ and MUAC <110 mm [Option ID = 18064]
2. Weight for height $<-2SD$ and MUAC <115 mm [Option ID = 18061]
3. Weight for height $<-3SD$ and MUAC <115 mm [Option ID = 18063]
4. Weight for height $<-3SD$ and MUAC <110 mm [Option ID = 18062]

Correct Answer :-

- Weight for height $<-3SD$ and MUAC <115 mm [Option ID = 18063]

42) Phospholipid contains

i. hydrophilic heads

ii. hydrophobic tails

iii. long water-soluble carbon chains

[Question ID = 4474]

1. i, iii [Option ID = 17893]
2. i, ii, iii [Option ID = 17895]
3. i, ii [Option ID = 17896]
4. ii, iii [Option ID = 17894]

Correct Answer :-

- i, ii [Option ID = 17896]

43) Phosphorylation of an enzyme is an example of [Question ID = 4470]

1. Irreversible non covalent modification [Option ID = 17880]
2. Irreversible covalent modification [Option ID = 17877]
3. Reversible non covalent modification [Option ID = 17879]
4. Reversible covalent modification [Option ID = 17878]

Correct Answer :-

- Reversible covalent modification [Option ID = 17878]

44) Cholelithiasis is a condition involving [Question ID = 4530]

1. Inflammation of the liver [Option ID = 18118]
2. Inflammation of the Gall Bladder [Option ID = 18117]
3. Stones in the kidney [Option ID = 18120]
4. Stones in the Gall Bladder [Option ID = 18119]

Correct Answer :-

- Stones in the Gall Bladder [Option ID = 18119]

45) Most important epimers of D-glucose are

i. D-galactose

ii. D-mannose

iii. D-fructose

iv. L-glucose

[Question ID = 4476]

1. All of these [Option ID = 17904]
2. Correct option is iv [Option ID = 17903]
3. Correct options are i and ii [Option ID = 17901]
4. Correct options are i, ii and iii [Option ID = 17902]

Correct Answer :-

- Correct options are i and ii [Option ID = 17901]

46) Following are the symptoms of Diabetes Mellitus (i) Polyuria (ii) Hypoglycaemia (iii) Glycosuria (iv) Polyphagia (v) Edema (vi) Dementia [Question ID = 4523]

1. (iv), (ii) and (iii) [Option ID = 18090]
2. (ii), (iv) and (v) [Option ID = 18092]
3. (vi), (iv) and (iii) [Option ID = 18091]
4. (i), (iii) and (iv) [Option ID = 18089]

Correct Answer :-

- (i), (iii) and (iv) [Option ID = 18089]

47) The emulsifier present in egg is [Question ID = 4561]

1. lecithin [Option ID = 18243]
2. Fat [Option ID = 18244]
3. gum [Option ID = 18241]
4. GMS [Option ID = 18242]

Correct Answer :-

- lecithin [Option ID = 18243]

48) Assertion: Food intolerance is an immune system response Reason: An allergen is a molecule that elicits an immune response [Question ID = 4534]

1. Both assertion and reason correct [Option ID = 18135]
2. Both assertion and reason incorrect [Option ID = 18136]
3. Assertion correct, reason incorrect [Option ID = 18133]
4. Assertion incorrect, reason correct [Option ID = 18134]

Correct Answer :-

- Assertion incorrect, reason correct [Option ID = 18134]

49) Assertion: Consumption of alcohol and drugs during pregnancy may cause congenital malformations Reason: Damage caused during hypertrophy is irreversible [Question ID = 4532]

1. Both assertion and reason correct [Option ID = 18127]
2. Both assertion and reason incorrect [Option ID = 18128]
3. Assertion incorrect, reason correct [Option ID = 18126]
4. Assertion correct, reason incorrect [Option ID = 18125]

Correct Answer :-

- Assertion correct, reason incorrect [Option ID = 18125]

50) Assertion: Digestive enzymes are released in inactive forms called zymogens. Reason: This is necessary to prevent the digestive enzymes from digesting the cells that produce them. [Question ID = 4484]

1. Both assertion and reason correct [Option ID = 17935]
2. Both assertion and reason incorrect [Option ID = 17936]
3. Assertion correct, reason incorrect [Option ID = 17933]
4. Assertion incorrect, reason correct [Option ID = 17934]

Correct Answer :-

- Both assertion and reason correct [Option ID = 17935]

51) Assertion: Carbohydrates provide energy to the body. Reason: Excessive intake of carbohydrates may lead to weight gain. [Question ID = 4482]

1. Both assertion and reason correct [Option ID = 17927]
2. Both assertion and reason incorrect [Option ID = 17928]
3. Assertion correct, reason incorrect [Option ID = 17925]
4. Assertion incorrect, reason correct [Option ID = 17926]

Correct Answer :-

- Both assertion and reason correct [Option ID = 17927]

52) Assertion: Arachidic acid is an unsaturated fatty acid. Reason: There are one or more double bonds between carbon atoms in unsaturated fatty acids. [Question ID = 4480]

1. Both assertion and reason correct [Option ID = 17919]
2. Both assertion and reason incorrect [Option ID = 17920]
3. Assertion incorrect, reason correct [Option ID = 17918]
4. Assertion correct, reason incorrect [Option ID = 17917]

Correct Answer :-

- Assertion incorrect, reason correct [Option ID = 17918]

53) Assertion: Egg acts as a leavening agent in the preparation of mayonnaise. Reason: Lecithin in egg prevents the separation of fat and aqueous layer in mayonnaise. [Question ID = 4552]

1. Both assertion and reason correct [Option ID = 18207]
2. Both assertion and reason incorrect [Option ID = 18208]
3. Assertion correct, reason incorrect [Option ID = 18205]
4. Assertion incorrect, reason correct [Option ID = 18206]

Correct Answer :-

- Assertion incorrect, reason correct [Option ID = 18206]

54) Assertion: Glutamate dehydrogenase occupies central position in nitrogen metabolism. Reason: This is because it catalyses conversion of ammonia to urea. [Question ID = 4477]

1. Both assertion and reason correct [Option ID = 17907]
2. Both assertion and reason incorrect [Option ID = 17908]
3. Assertion incorrect, reason correct [Option ID = 17906]
4. Assertion correct, reason incorrect [Option ID = 17905]

Correct Answer :-

- Assertion correct, reason incorrect [Option ID = 17905]

55) Assertion: Unpolished rice should be eaten. Reason: Polished rice lacks Vitamin B. [Question ID = 4481]

1. Both assertion and reason correct [Option ID = 17923]
2. Both assertion and reason incorrect [Option ID = 17924]
3. Assertion incorrect, reason correct [Option ID = 17922]
4. Assertion correct, reason incorrect [Option ID = 17921]

Correct Answer :-

- Both assertion and reason correct [Option ID = 17923]

56) Assertion: Glycine is an optically inactive amino acid. Reason: The central carbon in glycine has two identical groups. [Question ID = 4483]

1. Both assertion and reason correct [Option ID = 17931]
2. Both assertion and reason incorrect [Option ID = 17932]
3. Assertion correct, reason incorrect [Option ID = 17929]
4. Assertion incorrect, reason correct [Option ID = 17930]

Correct Answer :-

- Both assertion and reason correct [Option ID = 17931]

57) Assertion: Table salt is restricted in patients of Hypertension Reason: Sodium restriction enhances water retention [Question ID = 4533]

1. Both assertion and reason correct [Option ID = 18131]

2. Both assertion and reason incorrect [Option ID = 18132]
3. Assertion incorrect, reason correct [Option ID = 18130]
4. Assertion correct, reason incorrect [Option ID = 18129]

Correct Answer :-

- Assertion correct, reason incorrect [Option ID = 18129]

58) Magnesium hydroxide is an effective ----- to treat peptic ulcers [Question ID = 4529]

1. Antipyretic [Option ID = 18116]
2. Antihistamine [Option ID = 18114]
3. Antacid [Option ID = 18115]
4. Antibiotic [Option ID = 18113]

Correct Answer :-

- Antacid [Option ID = 18115]

59) To be transported throughout the body, fats are packaged in structures called [Question ID = 4506]

1. Phospholipids [Option ID = 18021]
2. Micelles [Option ID = 18022]
3. Lipoproteins [Option ID = 18023]
4. Triglycerides [Option ID = 18024]

Correct Answer :-

- Lipoproteins [Option ID = 18023]

60) 1 Kcal is equivalent to [Question ID = 4495]

1. 4184 KJ [Option ID = 17977]
2. 4.184 MJ [Option ID = 17979]
3. 4.184 KJ [Option ID = 17978]
4. 4184 MJ [Option ID = 17980]

Correct Answer :-

- 4.184 KJ [Option ID = 17978]

61) Which enzyme is used as an indicator of complete pasteurization in milk [Question ID = 4539]

1. Lipase [Option ID = 18156]
2. Polyphenol oxidase [Option ID = 18153]
3. Alkaline phosphatase [Option ID = 18155]
4. Peroxidase [Option ID = 18154]

Correct Answer :-

- Alkaline phosphatase [Option ID = 18155]

62) Which enzyme is responsible for brown color development in fruits? [Question ID = 4556]

1. Glycosidase [Option ID = 18223]
2. Lipase [Option ID = 18221]
3. Amylase [Option ID = 18224]
4. Phenolase [Option ID = 18222]

Correct Answer :-

- Phenolase [Option ID = 18222]

63) Blanching of fruits and vegetables has the following benefits [Question ID = 4542]

1. Improves colour [Option ID = 18165]
2. All of these [Option ID = 18168]
3. Inactivates enzymes [Option ID = 18167]
4. Reduces microorganisms [Option ID = 18166]

Correct Answer :-

- All of these [Option ID = 18168]

64) Substances that are able to support the growth of good bacteria are commonly known as [Question ID = 4540]

1. Probiotic [Option ID = 18157]

2. Nutrient media [Option ID = 18160]
3. Symbiotic [Option ID = 18159]
4. Prebiotic [Option ID = 18158]

Correct Answer :-

- Prebiotic [Option ID = 18158]

65) Arachidonate has 20 carbon atoms with [Question ID = 4471]

1. 3 double bonds [Option ID = 17881]
2. 8 double bonds [Option ID = 17884]
3. 4 double bonds [Option ID = 17883]
4. 2 double bonds [Option ID = 17882]

Correct Answer :-

- 4 double bonds [Option ID = 17883]

66) The RDA of iron for a sedentary woman is [Question ID = 4517]

1. 17 mg [Option ID = 18068]
2. 35 mg [Option ID = 18065]
3. 21 mg [Option ID = 18067]
4. 32 mg [Option ID = 18066]

Correct Answer :-

- 21 mg [Option ID = 18067]

67) The RDA of a nutrient is usually set at what level above the estimated average requirement? [Question ID = 4510]

1. 1 SD [Option ID = 18037]
2. 2 SD [Option ID = 18039]
3. Between 1 SD and 2 SD [Option ID = 18038]
4. Between 2 SD and 3 SD [Option ID = 18040]

Correct Answer :-

- 2 SD [Option ID = 18039]

68) The RDA for which nutrient is set at the EAR level [Question ID = 4512]

1. none of these [Option ID = 18048]
2. Energy [Option ID = 18047]
3. Iron [Option ID = 18046]
4. Protein [Option ID = 18045]

Correct Answer :-

- Energy [Option ID = 18047]

69) Match the following nutrient deficiency/excess with their consequences

Nutrient	Sign / Symptoms
(i) Folic acid	a. Mental retardation
(ii) Iodine	b. Neural tube defects
(iii) Fibre	c. Dental mottling
(iv) Fluoride	d. Constipation

[Question ID = 4503]

1. (i) and (a), (ii) and (b), (iii) and (d), (iv) and (c) [Option ID = 18011]
2. (i) and (c), (ii) and (a), (iii) and (d), (iv) and (b) [Option ID = 18010]
3. (i) and (c), (ii) and (c), (iii) and (a), (iv) and (a) [Option ID = 18012]
4. (i) and (b), (ii) and (a), (iii) and (d), (iv) and © [Option ID = 18009]

Correct Answer :-

- (i) and (b), (ii) and (a), (iii) and (d), (iv) and © [Option ID = 18009]

70)

Match the following diseases occurring due to deficiency of different vitamins:

Vitamins	Disease
i. Vitamin A deficiency	a) Pernicious anemia
ii. Vitamin-C deficiency	b) Rickets
iii. Vitamin-D deficiency	c) Night blindness
iv. Vitamin B ₁₂ deficiency	d) Scurvy

[Question ID = 5180]

- i-d, ii-c, iii-a, iv-b [Option ID = 20720]
- i-c, ii-a, iii-d, iv-b [Option ID = 20717]
- i-c, ii-d, iii-b, iv-a [Option ID = 20718]
- i-d, ii-b, iii-a, iv-c [Option ID = 20719]

Correct Answer :-

- i-c, ii-d, iii-b, iv-a [Option ID = 20718]

71)

Match the following structural organization of proteins:

i. Primary structure	a) α -helix
ii. Secondary structure	b) Sequence of amino acids
iii. Tertiary	c) three dimensional arrangement of single polypeptide
iv. Quaternary structure	d) three dimensional arrangement of two or more polypeptides

[Question ID = 5179]

- i-a, ii-c, iii-d, iv-b [Option ID = 20713]
- i-b, ii-a, iii-d, iv-c [Option ID = 20715]
- i-a, ii-b, iii-c, iv-d [Option ID = 20714]
- i-b, ii-a, iii-c, iv-d [Option ID = 20716]

Correct Answer :-

- i-b, ii-a, iii-c, iv-d [Option ID = 20716]

72)

Match the following hormones to their origin:

Hormones	Origin
i. Oxytocin	a) Pancreas
ii. Insulin	b) Posterior pituitary
iii. Estradiol	c) Adrenal cortex
iv. Cortisol	d) Ovaries

[Question ID = 4485]

- i-b, ii-c, iii-d, iv-a [Option ID = 17937]
- i-b, ii-a, iii-c, iv-d [Option ID = 17938]
- i-b, ii-a, iii-d, iv-c [Option ID = 17939]
- i-a, ii-b, iii-d, iv-c [Option ID = 17940]

Correct Answer :-

- i-b, ii-a, iii-d, iv-c [Option ID = 17939]

73) Match the following foods with their bioactive compounds

Food	Bioactive compound
(i) Watermelon	a. Allylsulphides
(ii) Garlic	b. Indoles
(iii) Tea	c. Lycopene
(iv) Orange	d. Limonene
(v) Broccoli	e. Catechin

[Question ID = 4548]

- (i) and (d), (ii) and (b), (iii) and (e), (iv) and (c), (v) and (a) [Option ID = 18191]
- (i) and (c), (ii) and (a), (iii) and (e), (iv) and (d), (v) and (b) [Option ID = 18190]
- (i) and (c), (ii) and (b), (iii) and (e), (iv) and (d), (v) and (a) [Option ID = 18192]
- (i) and (b), (ii) and (a), (iii) and (d), (iv) and (c), (v) and (e) [Option ID = 18189]

Correct Answer :-

- (i) and (c), (ii) and (a), (iii) and (e), (iv) and (d), (v) and (b) [Option ID = 18190]

74) Arrange in correct order the steps in preparation of parboiled rice

- | | |
|--------------|--------------|
| (a) Cleaning | (b) Drying |
| (c) Soaking | (d) Steaming |

[Question ID = 4554]

- (b) (c) (d) (a) [Option ID = 18214]
- (d) (b) (a) (c) [Option ID = 18215]
- (d) (a) (b) (c) [Option ID = 18213]
- (a) (c) (d) (b) [Option ID = 18216]

Correct Answer :-

- (a) (c) (d) (b) [Option ID = 18216]

75) Match the terms given in List-I with the food products given in list-II:

- | List-I | List-II |
|-------------------|-------------------|
| a) Fermentation | (i) sprouts salad |
| b) Emulsification | (ii) Chappati |
| c) Germination | (iii) Apple Pie |
| d) Dextrinisation | (iv) Bhatara |
| e) Shortening | (v) Poha |
| | (vi) Mayonnaise |

[Question ID = 4550]

- a-iv b-vi c-i d-ii e-iii [Option ID = 18200]
- a-iv b-vic-v d-ii e-iii [Option ID = 18197]
- a-iii b-vi c-i d-ii e-iv [Option ID = 18199]
- a-iii b-iv c-v d-ie-ii [Option ID = 18198]

Correct Answer :-

- a-iv b-vi c-i d-ii e-iii [Option ID = 18200]

76) For a peptide bond all of the following statements are true except

[Question ID = 4489]

1. it is more stable in *cis* configuration than in the *trans* configuration [Option ID = 17955]
2. it is planar [Option ID = 17954]
3. it exhibits partial double bond character [Option ID = 17953]
4. in proline, the nitrogen is attached to the side chain [Option ID = 17956]

Correct Answer :-

- it is more stable in *cis* configuration than in the *trans* configuration [Option ID = 17955]

77) Consider the following enzymes of glycolytic pathway:

1. Glyceraldehyde-3-phosphate dehydrogenase

2. Enolase

3. Pyruvate kinase

4. Phosphoglycerate Kinase

The correct sequence in which they appear in the pathway is-

[Question ID = 4494]

1. 2, 1, 4, 3 [Option ID = 17973]
2. 1, 4, 2, 3 [Option ID = 17976]
3. 4, 3, 2, 1 [Option ID = 17975]
4. 3, 2, 1, 4 [Option ID = 17974]

Correct Answer :-

- 1, 4, 2, 3 [Option ID = 17976]

78) Choose the correct statements

i. Gluconeogenesis occurs mainly in liver and to a smaller extent in kidneys

ii. Glycogen phosphorylase, involved in glycogenolysis requires biotin as cofactor

iii. Leucine and lysine do not participate in gluconeogenesis

iv. During glycogenolysis terminal glucose residue gets removed from non-reducing end

[Question ID = 4478]

1. Correct options are ii, iii, & iv [Option ID = 17912]
2. Correct options are i, ii & iii [Option ID = 17910]
3. Correct options are i & ii [Option ID = 17909]
4. Correct options are i, iii & iv [Option ID = 17911]

Correct Answer :-

- Correct options are i, iii & iv [Option ID = 17911]

79) What happens to chlorophyll when heated with acid

[Question ID = 4558]

1. Mg^{2+} is replaced [Option ID = 18229]
2. Pheophytin is produced [Option ID = 18230]
3. All of these [Option ID = 18232]
4. Color changes to olive green [Option ID = 18231]

Correct Answer :-

- All of these [Option ID = 18232]

80) Which of the following foods does not contain gluten and is acceptable for patients with celiac disease? (a) Wheat flour (b) Rice flour (c) Gram flour (d) Corn flour [Question ID = 4521]

1. (b), (c), (d) are correct [Option ID = 18081]
2. (d), (a), (b) are correct [Option ID = 18084]
3. (a), (b), (c) are correct [Option ID = 18082]
4. (c), (d), (a) are correct [Option ID = 18083]

Correct Answer :-

- (b), (c), (d) are correct [Option ID = 18081]

81) Which of the following is an ω -3 (omega 3) fatty acid? [Question ID = 4515]

1. Oleic acid [Option ID = 18060]
2. Linoleic acid [Option ID = 18057]

3. Arachadonic acid [Option ID = 18059]
4. α -Linolenic acid [Option ID = 18058]

Correct Answer :-

- α -Linolenic acid [Option ID = 18058]

82) Which of the following is an essential amino acid?

- i. Tryptophan
- ii. Methionine
- iii. Lysine
- iv. Aspartic acid

[Question ID = 4473]

1. i, ii, iii [Option ID = 17889]
2. i, ii, iv [Option ID = 17891]
3. i, iii, iv [Option ID = 17892]
4. ii, iii, iv [Option ID = 17890]

Correct Answer :-

- i, ii, iii [Option ID = 17889]

83) Which of the following foods is expected to have least microorganisms [Question ID = 4559]

1. Canned berries [Option ID = 18234]
2. Pasteurized milk [Option ID = 18233]
3. Blanched peas [Option ID = 18235]
4. Frozen fish [Option ID = 18236]

Correct Answer :-

- Canned berries [Option ID = 18234]

84) Which of the following pair of enzymes are responsible for tenderization of meat? [Question ID = 4535]

1. Cathepsin and papain [Option ID = 18137]
2. Amylase and papain [Option ID = 18138]
3. Rennin and peptidase [Option ID = 18139]
4. Rennin and zymase [Option ID = 18140]

Correct Answer :-

- Cathepsin and papain [Option ID = 18137]

85) Which of the following pair of hormones help in synthesis and ejection of milk after delivery? [Question ID = 4501]

1. Oxytocin and FSH [Option ID = 18001]
2. LH and FSH [Option ID = 18002]
3. Progesterone and prolactin [Option ID = 18003]
4. Prolactin and oxytocin [Option ID = 18004]

Correct Answer :-

- Prolactin and oxytocin [Option ID = 18004]

86) Which of the following is required as a component of blood haemoglobin? [Question ID = 4467]

1. Iron [Option ID = 17865]
2. Calcium [Option ID = 17867]
3. Copper [Option ID = 17868]
4. Magnesium [Option ID = 17866]

Correct Answer :-

- Iron [Option ID = 17865]

87) Which of the following toxic compound is responsible for Lathyrism [Question ID = 4562]

1. BOAA [Option ID = 18246]
2. BHA [Option ID = 18247]
3. All of these [Option ID = 18248]
4. BOPP [Option ID = 18245]

Correct Answer :-

- BOAA [Option ID = 18246]

88) Which of the following protein was used as a standard to rank other proteins using chemical score? [Question ID = 4504]

1. Milk [Option ID = 18015]
2. Soya [Option ID = 18016]
3. Egg [Option ID = 18014]
4. Wheat [Option ID = 18013]

Correct Answer :-

- Egg [Option ID = 18014]

89) Which of the following enzymes are located in the cytoplasm?

i. Enzymes of glycolysis

ii. Enzymes for fatty acid oxidation

iii. Enzymes of oxidative phosphorylation

[Question ID = 4479]

1. i, iii [Option ID = 17914]
2. i, ii, iii [Option ID = 17913]
3. ii, iii [Option ID = 17915]
4. i [Option ID = 17916]

Correct Answer :-

- i [Option ID = 17916]

90) Which of the following amino acid when exposed to ninhydrin produces a yellow color? [Question ID = 4466]

1. Proline [Option ID = 17862]
2. Alanine [Option ID = 17863]
3. Asparagine [Option ID = 17861]
4. Valine [Option ID = 17864]

Correct Answer :-

- Proline [Option ID = 17862]

91) Which of the following compound is used in cryogenic freezing? [Question ID = 4564]

1. Liquid Nitrogen [Option ID = 18253]
2. Carbon Dioxide gas [Option ID = 18254]
3. All of these [Option ID = 18256]
4. Hydrogen gas [Option ID = 18255]

Correct Answer :-

- Liquid Nitrogen [Option ID = 18253]

92) Which of the following statements about enzymes or their function is true?

i. Enzymes do not alter the overall change in free energy for a reaction

ii. Enzymes are proteins whose three-dimensional form is key to their function

iii. Enzymes speed up the reactions by lowering activation energy

[Question ID = 4475]

1. i, iii [Option ID = 17899]
2. i, ii, iii [Option ID = 17898]
3. i, ii [Option ID = 17897]
4. ii, iii [Option ID = 17900]

Correct Answer :-

- i, ii, iii [Option ID = 17898]

93) Which of the following components are essential for setting of jams? [Question ID = 4538]

1. Pectin, acid and sugar [Option ID = 18151]
2. Pectin, sugar and water [Option ID = 18152]
3. Peels, sugar and water [Option ID = 18149]
4. Flavour, sugar and water [Option ID = 18150]

Correct Answer :-

- Pectin, acid and sugar [Option ID = 18151]

94)

The absorption of calcium is adversely affected by

- i. Oxalate**
- ii. Phytate**
- iii. Oxidase**
- iv. Citrate**

[Question ID = 4514]

1. ii and iii [Option ID = 18054]
2. i and ii [Option ID = 18056]
3. i and iii [Option ID = 18053]
4. iii and iv [Option ID = 18055]

Correct Answer :-

- i and ii [Option ID = 18056]

95) Select the correct statement from the answers given

- i. Breast milk is rich in Sucrose**
- ii. Breast milk is rich in Lactose**
- iii. Breast milk is rich in Glucose**
- iv. Breast milk is rich in Maltose**

[Question ID = 4511]

1. Both i and ii is correct [Option ID = 18041]
2. Only ii is correct [Option ID = 18043]
3. Only ii and iv statement is correct [Option ID = 18044]
4. Both ii and iii is correct [Option ID = 18042]

Correct Answer :-

- Only ii is correct [Option ID = 18043]

96) Quantity of iron and iodine in double fortified salt (NIN formulation) in one gram is [Question ID = 4513]

1. 1000 µg and 50µg [Option ID = 18049]
2. 1000 µg and 30 µg [Option ID = 18050]
3. 900 µg and 30 µg [Option ID = 18052]
4. 900 µg and 50µg [Option ID = 18051]

Correct Answer :-

- 1000 µg and 30 µg [Option ID = 18050]

97) Gestational diabetes is- [Question ID = 4507]

1. Diabetes diagnosed during pregnancy [Option ID = 18026]
2. Diabetes diagnosed in adolescence [Option ID = 18027]
3. Diabetes diagnosed after pregnancy [Option ID = 18025]
4. Pre-diabetic stage resulting in diabetes after 5 years or more [Option ID = 18028]

Correct Answer :-

- Diabetes diagnosed during pregnancy [Option ID = 18026]

98) The FLAG sign due to discolouration of hair in bands is characteristic symptom of [Question ID = 4496]

1. Pellagra [Option ID = 17983]
2. Kwashiorkor [Option ID = 17981]
3. Marasmus [Option ID = 17982]
4. Beri-beri [Option ID = 17984]

Correct Answer :-

- Kwashiorkor [Option ID = 17981]

99) WHO recommendation for determining xerophthalmia as a public health problem is [Question ID = 4509]

1. none of these [Option ID = 18036]
2. Prevalence of night blindness in more than 1 percent of the population [Option ID = 18033]
3. Prevalence of bitot spots in more than 0.5 percent of the population [Option ID = 18034]
4. Both of the above [Option ID = 18035]

Correct Answer :-

- Both of the above [Option ID = 18035]

100) Flavor of coffee develops during_____ [Question ID = 4563]

1. Boiling [Option ID = 18252]
2. Roasting [Option ID = 18251]
3. Grinding [Option ID = 18249]
4. Blending [Option ID = 18250]

Correct Answer :-

- Roasting [Option ID = 18251]