

## DU MSc Food and Nutrition

Topic:- DU\_J19\_MSC\_FN

**1) Enzymes that catalyse the same reaction with different kinetic properties are known as [Question ID = 216]**

1. Allosteric enzymes [Option ID = 862]
2. Isozymes [Option ID = 861]
3. Holoenzymes [Option ID = 864]
4. Coenzymes [Option ID = 863]

**Correct Answer :-**

- Isozymes [Option ID = 861]

**2) The integrator between urea and TCA cycle is [Question ID = 240]**

1. Citrate [Option ID = 960]
2. Malate [Option ID = 958]
3. Pyruvate [Option ID = 959]
4. Fumarate [Option ID = 957]

**Correct Answer :-**

- Fumarate [Option ID = 957]

**3) Which of the following microorganism is associated with the processing of canning:**

**[Question ID = 276]**

1. *Listeria monocytogenes* [Option ID = 1102]
2. *Clostridium botulinum* [Option ID = 1104]
3. *Salmonella typhi* [Option ID = 1101]
4. *Escherichia coli* [Option ID = 1103]

**Correct Answer :-**

- *Salmonella typhi* [Option ID = 1101]

**4) Which of the following is NOT the part of the package services provided by ICDS**

**[Question ID = 227]**

1. Medical referral services [Option ID = 908]
2. Periodic health check-ups [Option ID = 907]
3. Formal education [Option ID = 906]
4. Supplementary nutrition [Option ID = 905]

**Correct Answer :-**

- Supplementary nutrition [Option ID = 905]

**5) Which of the following is NOT an eating disorder**

[Question ID = 226]

1. Anorexia nervosa [Option ID = 902]
2. Anxiety disorder [Option ID = 903]
3. Bulimia Nervosa [Option ID = 901]
4. Binge eating disorder [Option ID = 904]

**Correct Answer :-**

- Bulimia Nervosa [Option ID = 901]

**6) Which of the following pair of hormones help in synthesis and ejection of milk after delivery?****[Question ID = 210]**

1. Prolactin and oxytocin [Option ID = 840]
2. Oxytocin and FSH [Option ID = 837]
3. Progesterone and prolactin [Option ID = 839]
4. LH and FSH [Option ID = 838]

**Correct Answer :-**

- Oxytocin and FSH [Option ID = 837]

**7) Which of the following disease associated with elderly causes trembling of arms, face, legs and poor muscle coordination****[Question ID = 252]**

1. Parkinson's Disease [Option ID = 1007]
2. Alzheimer's Disease [Option ID = 1005]
3. Cachexia [Option ID = 1006]
4. Osteoporosis [Option ID = 1008]

**Correct Answer :-**

- Alzheimer's Disease [Option ID = 1005]

**8) Which of the following is substitute of crystal violet in Gram's staining****[Question ID = 287]**

1. Bromocresol blue [Option ID = 1147]
2. Safranin [Option ID = 1148]
3. Lactophenol cotton blue [Option ID = 1146]
4. Methylene blue [Option ID = 1145]

**Correct Answer :-**

- Methylene blue [Option ID = 1145]

**9) Foam is a colloidal dispersion of [Question ID = 281]**

1. Solid in liquid [Option ID = 1122]
2. Liquid in liquid [Option ID = 1121]
3. Liquid in solid [Option ID = 1123]
4. Gas in liquid [Option ID = 1124]

**Correct Answer :-**



**10) Pasteurisation is a process by which: [Question ID = 275]**

1. Fat is broken in to small particles [Option ID = 1099]
2. Milk is sweetened [Option ID = 1098]
3. Milk is condensed [Option ID = 1097]
4. Harmful bacteria are destroyed [Option ID = 1100]

**Correct Answer :-**

- Milk is condensed [Option ID = 1097]

**11) The active principle present in turmeric is known as \_\_\_\_\_ [Question ID = 291]**

1. Oleoresin [Option ID = 1163]
2. None [Option ID = 1164]
3. Crocerin [Option ID = 1161]
4. Curcumin [Option ID = 1162]

**Correct Answer :-**

- Crocerin [Option ID = 1161]

**12) Ketone bodies are synthesized from fatty acid oxidation products by which of the following organ? [Question ID = 258]**

1. Intestine [Option ID = 1031]
2. Brain [Option ID = 1032]
3. Liver [Option ID = 1029]
4. Kidney [Option ID = 1030]

**Correct Answer :-**

- Liver [Option ID = 1029]

**13) Carotenoids are bioactive compounds found in [Question ID = 236]**

1. All [Option ID = 944]
2. Pumpkin [Option ID = 943]
3. Green leafy vegetables [Option ID = 941]
4. Mango [Option ID = 942]

**Correct Answer :-**

- Green leafy vegetables [Option ID = 941]

**14) Application of food irradiation include :**

**[Question ID = 278]**

1. Both sterilisation and inhibition of sprouting [Option ID = 1111]
2. Sterilisation [Option ID = 1109]
3. Inhibition of sprouting [Option ID = 1110]
4. None of the above [Option ID = 1112]

**Correct Answer :-**

- Sterilisation [Option ID = 1109]

15) Bland diets are

- i. Free from mechanical, thermal and chemical irritants
- ii. Low in dietary fibre
- iii. Free from strongly flavoured vegetables and fruits
- iv. Free from stimulants and spices

Select which one is true

[Question ID = 301]

- 1. i [Option ID = 1201]
- 2. i , iv [Option ID = 1202]
- 3. i , ii , iii [Option ID = 1203]
- 4. i, ii, iii, iv [Option ID = 1204]

**Correct Answer :-**

- i [Option ID = 1201]

**16) The S.N.F. of double toned milk should be as follows : [Question ID = 293]**

- 1. 9% [Option ID = 1169]
- 2. 5.20% [Option ID = 1172]
- 3. 6.50% [Option ID = 1171]
- 4. 7.20% [Option ID = 1170]

**Correct Answer :-**

- 9% [Option ID = 1169]

**17) The conditions which are controlled during storage of fruits is/are [Question ID = 266]**

- 1. Atmospheric gas [Option ID = 1063]
- 2. Humidity [Option ID = 1062]
- 3. Temperature [Option ID = 1061]
- 4. All of the above [Option ID = 1064]

**Correct Answer :-**

- Temperature [Option ID = 1061]

**18) The homogenous mixtures in which one substance (solute) is dissolved in another (solvent) is called: [Question ID = 273]**

- 1. Coarse dispersion [Option ID = 1092]
- 2. Colloidal dispersion [Option ID = 1090]
- 3. True Solution [Option ID = 1091]
- 4. Suspension [Option ID = 1089]

**Correct Answer :-**

- Suspension [Option ID = 1089]

**19) Tocopherol is an example of**

**[Question ID = 286]**

- 1. Flavoring agent [Option ID = 1143]
- 2. Antioxidant [Option ID = 1142]
- 3. Anticaking agent [Option ID = 1141]
- 4. None of these [Option ID = 1144]



- Anticaking agent [Option ID = 1141]

**20) Iron-containing oxygen storage protein is [Question ID = 234]**

1. Myoglobin [Option ID = 934]
2. Oxyhaemoglobin [Option ID = 933]
3. Haemoglobin [Option ID = 935]
4. All of the above [Option ID = 936]

**Correct Answer :-**

- Oxyhaemoglobin [Option ID = 933]

**21) Polyunsaturated omega-6 fatty acid arachidonic acid can be represented as [Question ID = 245]**

1. 20:4 (6,8,11,14) [Option ID = 979]
2. 18:4 (2,4,6,18) [Option ID = 980]
3. 20:4 (5,8,11,14) [Option ID = 977]
4. 18:4 (3,4,5,6) [Option ID = 978]

**Correct Answer :-**

- 20:4 (5,8,11,14) [Option ID = 977]

**22) The process used to inactivate enzymes: [Question ID = 277]**

1. Homogenisation [Option ID = 1106]
2. All of the above [Option ID = 1108]
3. Blanching [Option ID = 1105]
4. Cellar Storage [Option ID = 1107]

**Correct Answer :-**

- Blanching [Option ID = 1105]

**23) The process of glycolysis is regulated by****i. Hexokinase****ii. Phosphofructokinase****iii. Pyruvate kinase****iv. Aldolase [Question ID = 223]**

1. Correct options are i, ii and iii [Option ID = 891]
2. None of the above [Option ID = 892]
3. Correct options are i and ii [Option ID = 889]
4. Correct options are ii, iii and iv [Option ID = 890]

**Correct Answer :-**

- Correct options are i and ii [Option ID = 889]

**24) MCT's are added in diet of [Question ID = 302]**

1. Obesity [Option ID = 1205]
2. Hypertension [Option ID = 1207]
3. Malabsorption syndrome [Option ID = 1206]
4. Renal diseases [Option ID = 1208]

**Correct Answer :-**

**25) Ornithine transcarbamoylase reaction of urea cycle occurs in the [Question ID = 242]**

1. Mitochondrial Matrix [Option ID = 966]
2. None of the above [Option ID = 968]
3. Nucleus [Option ID = 967]
4. Cytosol [Option ID = 965]

**Correct Answer :-**

- Cytosol [Option ID = 965]

**26) Forms of Discussion method include:****i. Forum****ii. Buzz session****iii. Demonstration****iv. Role play [Question ID = 207]**

1. i and ii are correct [Option ID = 825]
2. i and iii are correct [Option ID = 827]
3. ii and iii are correct [Option ID = 826]
4. i, ii, iii and iv are correct [Option ID = 828]

**Correct Answer :-**

- i and ii are correct [Option ID = 825]

**27) A diet rich in saturated fats, can be linked to which of the following? [Question ID = 205]**

1. kidney failure [Option ID = 817]
2. cardiovascular disease [Option ID = 820]
3. anorexia [Option ID = 819]
4. bulimia [Option ID = 818]

**Correct Answer :-**

- kidney failure [Option ID = 817]

**28) Examples of insulin antagonist hormones are****i. Glucagon****ii. Epinephrine****iii. Oestrogen [Question ID = 222]**

1. Correct options are i, ii and iii [Option ID = 887]
2. None of the above [Option ID = 888]
3. Correct options are i and ii [Option ID = 885]
4. Correct options are ii and iii [Option ID = 886]

**Correct Answer :-**

- Correct options are i and ii [Option ID = 885]

**29) Aromatic foods include [Question ID = 269]**

1. Herbs [Option ID = 1074]
2. Spices [Option ID = 1073]
3. Seasoning [Option ID = 1075]
4. All of the above [Option ID = 1076]

- Spices [Option ID = 1073]

**30) A metal ion or an organic compound that is covalently attached to a protein [Question ID = 215]**

1. Apoprotein [Option ID = 859]
2. Vitamin [Option ID = 860]
3. Prosthetic group [Option ID = 858]
4. Cofactor [Option ID = 857]

**Correct Answer :-**

- Cofactor [Option ID = 857]

**31) The fifth basic taste is called as: [Question ID = 289]**

1. astringency [Option ID = 1153]
2. volatile [Option ID = 1156]
3. bitter [Option ID = 1155]
4. umami [Option ID = 1154]

**Correct Answer :-**

- astringency [Option ID = 1153]

**32) Vitamin D deficiency may lead to**  
**i. Increase activity of phagocytes**  
**ii. Increases risk of diarrhoea**  
**iii. Reduces integrity of epithelium**  
**iv. Increases the incidence of respiratory tract infection**  
**Which one is incorrect [Question ID = 303]**

1. i [Option ID = 1211]
2. iv [Option ID = 1209]
3. ii [Option ID = 1210]
4. All [Option ID = 1212]

**Correct Answer :-**

- iv [Option ID = 1209]

**33) Conversion of pyruvic acid to acetyl CoA takes place in the [Question ID = 217]**

1. Ribosomes [Option ID = 867]
2. Mitochondria [Option ID = 865]
3. Nucleus [Option ID = 868]
4. Cytosol [Option ID = 866]

**Correct Answer :-**

- Mitochondria [Option ID = 865]

**34) Peyer's patches are [Question ID = 248]**

1. Lymphatic tissues present in the stomach [Option ID = 989]
2. Lymphoid nodules present in the ileum [Option ID = 990]
3. Bleeding ulcers present in the colon [Option ID = 991]
4. Bleeding lymph nodes present in the duodenum [Option ID = 992]

- Lymphatic tissues present in the stomach [Option ID = 989]

**35) The enzyme responsible for curdling of milk is [Question ID = 283]**

1. Tannin [Option ID = 1129]
2. Lipase [Option ID = 1131]
3. Amylase [Option ID = 1132]
4. Rennin [Option ID = 1130]

**Correct Answer :-**

- Tannin [Option ID = 1129]

**36) The following's does not have phosphorous [Question ID = 255]**

1. NAD<sup>+</sup> [Option ID = 1018]
2. TPP [Option ID = 1019]
3. Riboflavin [Option ID = 1017]
4. CoASH [Option ID = 1020]

**Correct Answer :-**

- Riboflavin [Option ID = 1017]

**37) The carbon atom source while producing urea in the urea cycle is [Question ID = 238]**

1. Aspartic acid [Option ID = 951]
2. Glucose [Option ID = 950]
3. CO<sub>2</sub> [Option ID = 949]
4. Arginine [Option ID = 952]

**Correct Answer :-**

- CO<sub>2</sub> [Option ID = 949]

**38) Spongy bleeding gums is caused by which nutrient deficiency?****[Question ID = 246]**

1. Iron [Option ID = 981]
2. Vitamin C [Option ID = 982]
3. Vitamin D [Option ID = 984]
4. Vitamin B-12 [Option ID = 983]

**Correct Answer :-**

- Iron [Option ID = 981]

**39) Lard is [Question ID = 294]**

1. an animal fat from cow [Option ID = 1173]
2. a plant fat from groundnut [Option ID = 1176]
3. an animal fat from hogs [Option ID = 1174]
4. a plant fat from soyabean [Option ID = 1175]

**Correct Answer :-**

- an animal fat from cow [Option ID = 1173]



40) What is the main function of the chylomicron? [Question ID = 1036] [www.FirstRanker.com](http://www.FirstRanker.com)

1. To transport newly synthesized sphingolipids to the blood [Option ID = 1039]
2. To transport fatty acids into the mitochondrion [Option ID = 1040]
3. To carry cholesterol from its site of synthesis in the endoplasmic reticulum to the plasma membrane. [Option ID = 1038]
4. To aid in the assembly of chylomicrons [Option ID = 1037]

**Correct Answer :-**

- To aid in the assembly of chylomicrons [Option ID = 1037]

**41) Normal osmolarity of body fluids is: [Question ID = 231]**

1. 600 mOsm/L [Option ID = 922]
2. 300 mOsm/L [Option ID = 921]
3. 150 mOsm/L [Option ID = 924]
4. 1000 mOsm/L [Option ID = 923]

**Correct Answer :-**

- 300 mOsm/L [Option ID = 921]

**42) HACCP stands for [Question ID = 270]**

1. High Analysis Critical Control Pressure [Option ID = 1080]
2. High Analysis Critical Control Parameter [Option ID = 1078]
3. Hazard Analysis Critical Control Parameter [Option ID = 1079]
4. Hazard Analysis Critical Control Point [Option ID = 1077]

**Correct Answer :-**

- Hazard Analysis Critical Control Point [Option ID = 1077]

**43) ISO 14000 is a family of standards related to : [Question ID = 290]**

1. Marketing management [Option ID = 1159]
2. Manufacturing management [Option ID = 1158]
3. Environment management [Option ID = 1157]
4. All of the above [Option ID = 1160]

**Correct Answer :-**

- Environment management [Option ID = 1157]

**44) If body temperature due to infection rises to 39°C, then the BMR will rise by: [Question ID = 247]**

1. 28% [Option ID = 987]
2. 7% [Option ID = 985]
3. 56% [Option ID = 988]
4. 14% [Option ID = 986]

**Correct Answer :-**

- 7% [Option ID = 985]

**45) Cardiac beri-beri occurs due to**

**[Question ID = 232]**



1. Starling [Option ID = 926]
2. Thiamine deficiency [Option ID = 926]
3. Goitre [Option ID = 927]
4. Marasmus [Option ID = 925]

**Correct Answer :-**

- Marasmus [Option ID = 925]

**46) The Vitamin D has an important functions to play : [Question ID = 211]**

1. In the Bone [Option ID = 842]
2. In the Intestine [Option ID = 843]
3. In the Kidney [Option ID = 841]
4. All of the above [Option ID = 844]

**Correct Answer :-**

- In the Kidney [Option ID = 841]

**47) Ascorbic acid requirement of lactating mother is**

**[Question ID = 235]**

1. 80 mg/day [Option ID = 940]
2. 60 mg/day [Option ID = 937]
3. 25 mg/day [Option ID = 939]
4. 40 mg/day [Option ID = 938]

**Correct Answer :-**

- 60 mg/day [Option ID = 937]

**48) During starvation, the first reserve nutrient to be depleted is [Question ID = 243]**

1. Glycogen [Option ID = 969]
2. Triglycerides [Option ID = 970]
3. Cholesterol [Option ID = 972]
4. Proteins [Option ID = 971]

**Correct Answer :-**

- Glycogen [Option ID = 969]

**49) A natural colour used in food is**

**[Question ID = 282]**

1. Annatto [Option ID = 1125]
2. Indigo carmine [Option ID = 1127]
3. Tartrazine [Option ID = 1126]
4. Metanil yellow [Option ID = 1128]

**Correct Answer :-**

- Annatto [Option ID = 1125]

**50) Assertion: Hemoglobin is a protein having quaternary structure**

**Reason: Hemoglobin transports oxygen in blood [Question ID = 220]**



1. Assertion is correct but reason is incorrect [Option ID = 877]
2. Assertion and reason both are correct [Option ID = 878]
3. Assertion and reason both are incorrect [Option ID = 880]
4. Assertion is incorrect and reason is correct [Option ID = 879]

**Correct Answer :-**

- Assertion is correct but reason is incorrect [Option ID = 877]

**51) Assertion : Egg yolk is used for making mayonnaise.**

**Reason: Egg yolk serves as an emulsifying agent in preparation of mayonnaise. [Question ID = 284]**

1. Both Assertion and Reason are true [Option ID = 1134]
2. Assertion is true but Reason is false [Option ID = 1135]
3. Assertion is false but Reason is true [Option ID = 1136]
4. Both Assertion and Reason are false [Option ID = 1133]

**Correct Answer :-**

- Both Assertion and Reason are false [Option ID = 1133]

**52) Assertion: Proline is an imino acid**

**Reason: Proline has a secondary amine group [Question ID = 244]**

1. Assertion is correct but reason is incorrect [Option ID = 973]
2. Assertion and reason both are correct [Option ID = 974]
3. Assertion and reason both are incorrect [Option ID = 976]
4. Assertion is incorrect and reason is correct [Option ID = 975]

**Correct Answer :-**

- Assertion is correct but reason is incorrect [Option ID = 973]

**53) Assertion: Enzymes are biocatalysts that accelerate rate of reaction**

**Reason: Enzymes lower the activation energy of a reaction [Question ID = 219]**

1. Assertion and reason both are correct [Option ID = 874]
2. Assertion is correct but reason is incorrect [Option ID = 873]
3. Assertion and reason both are incorrect [Option ID = 876]
4. Assertion is incorrect and reason is correct [Option ID = 875]

**Correct Answer :-**

- Assertion is correct but reason is incorrect [Option ID = 873]

**54) Assertion: Glycolysis is an energy yielding process**

**Reason: Glycolysis of one molecule glucose yields 2 molecules of pyruvate, ATP and NADH each [Question ID = 221]**

1. Assertion and reason both are incorrect [Option ID = 884]
2. Assertion is correct but reason is incorrect [Option ID = 881]
3. Assertion and reason both are correct [Option ID = 882]
4. Assertion is incorrect and reason is correct [Option ID = 883]

**Correct Answer :-**

- Assertion is correct but reason is incorrect [Option ID = 881]

**55) Upon exposure to light rhodopsin forms [Question ID = 257]**



1. All trans-retinal [Option ID = 1025]
2. Retinol [Option ID = 1027]
3. Retinoic acid [Option ID = 1028]
4. Cis-retinal [Option ID = 1026]

**Correct Answer :-**

- All trans-retinal [Option ID = 1025]

**56) The carbon atom which becomes asymmetric when the straight chain form of monosaccharide changes into ring form is known as [Question ID = 264]**

1. None of these [Option ID = 1056]
2. Neoisomeric carbon atom [Option ID = 1055]
3. Epimeric carbon atom [Option ID = 1054]
4. Anomeric carbon atom [Option ID = 1053]

**Correct Answer :-**

- Anomeric carbon atom [Option ID = 1053]

**57) Dysphagia is a symptom that means [Question ID = 253]**

1. Loss of appetite [Option ID = 1009]
2. Difficulty in swallowing [Option ID = 1012]
3. Fatty diarrhoea [Option ID = 1011]
4. Excessive leanness [Option ID = 1010]

**Correct Answer :-**

- Loss of appetite [Option ID = 1009]

**58) The function of chalaza in egg white is [Question ID = 267]**

1. None of the above [Option ID = 1068]
2. Fertilization of egg [Option ID = 1067]
3. Thinning of albumen [Option ID = 1066]
4. Keep yolk in position [Option ID = 1065]

**Correct Answer :-**

- Keep yolk in position [Option ID = 1065]

**59) Rigor mortis is**

**[Question ID = 268]**

1. Lot of physical activity [Option ID = 1069]
2. Cell chemical reaction [Option ID = 1070]
3. Stiffening of carcass [Option ID = 1071]
4. None of these [Option ID = 1072]

**Correct Answer :-**

- Lot of physical activity [Option ID = 1069]

**60) Which of the following is NOT the function of vitamin C [Question ID = 212]**

1. Immune function [Option ID = 847]
2. Energy metabolism [Option ID = 846]
3. Antioxidant activity [Option ID = 848]

**Correct Answer :-**

- Collagen synthesis [Option ID = 845]

**61) An amino acid that destabilizes an alpha-helix is [Question ID = 224]**

1. Proline [Option ID = 893]
2. Threonine [Option ID = 896]
3. Alanine [Option ID = 894]
4. Asparagine [Option ID = 895]

**Correct Answer :-**

- Proline [Option ID = 893]

**62) Vitamin required by transaminases is [Question ID = 239]**

1. Pyridoxine [Option ID = 953]
2. Thiamine [Option ID = 955]
3. Ascorbic acid [Option ID = 954]
4. Riboflavin [Option ID = 956]

**Correct Answer :-**

- Pyridoxine [Option ID = 953]

**63) Assertion: Supplementation of dietary folate is necessary during pregnancy  
Reason: Neural tube defects in the foetus is caused due to deficiency of folic acid.****[Question ID = 296]**

1. Assertion correct reason incorrect [Option ID = 1181]
2. Assertion incorrect reason correct [Option ID = 1183]
3. Assertion and reason both correct [Option ID = 1182]
4. Assertion and reason both incorrect [Option ID = 1184]

**Correct Answer :-**

- Assertion correct reason incorrect [Option ID = 1181]

**64) Assertion: Essential fatty acids Linoleic acid and Linolenic acid help in reduction of CVDs  
Reason: Essential fatty acids are synthesized within the body and are not necessary to be taken in the diet****[Question ID = 297]**

1. Assertion correct reason incorrect [Option ID = 1185]
2. Assertion incorrect reason correct [Option ID = 1187]
3. Assertion and reason both correct [Option ID = 1186]
4. Assertion and reason both incorrect [Option ID = 1188]

**Correct Answer :-**

- Assertion correct reason incorrect [Option ID = 1185]

**65) The red colour present in tomato is due to: [Question ID = 280]**

1. Lycopenes [Option ID = 1117]

2. Anthoxanthins [Option ID = 1118]
3. Carotenoid [Option ID = 1120]
4. Anthocyanins [Option ID = 1119]

**Correct Answer :-**

- Lycopenes [Option ID = 1117]

**66) Zinc is an important micronutrient that helps in the reduction of the severity of the following illness [Question ID = 249]**

1. Diarrhoea [Option ID = 994]
2. All of the above [Option ID = 996]
3. Typhoid [Option ID = 995]
4. Common cold [Option ID = 993]

**Correct Answer :-**

- Common cold [Option ID = 993]

**67) Match the following:**

Enteral feed      Special characteristic

- |                         |  |
|-------------------------|--|
| i. Oligomeric formulas  | a. One kind of nutrient predominates                 |
| ii. Polymeric formulas  | b. MCTs, n-3PUFA, & beta-carotene are added          |
| iii. Modular formulas   | c. Provide nitrogen as whole protein                 |
| iv. Opportunistic feeds | d. May provide nitrogen from crystalline amino acids |

**[Question ID = 298]**

1. i-b; ii-c; iii-d; iv-a [Option ID = 1189]
2. i-d ; ii-c; iii-a ; iv-b [Option ID = 1191]
3. i-d; ii-a; iii- c ; iv-b [Option ID = 1192]
4. i-b ; ii-a; iii-c; iv-d [Option ID = 1190]

**Correct Answer :-**

- i-b; ii-c; iii-d; iv-a [Option ID = 1189]

**68) Calcitriol is [Question ID = 256]**

1. 25-hydroxy cholecalciferol [Option ID = 1022]
2. 1-hydroxy cholecalciferol [Option ID = 1021]
3. 1, 25-dihydroxy cholecalciferol [Option ID = 1024]
4. 24, 25-dihydroxy cholecalciferol [Option ID = 1023]

**Correct Answer :-**

- 1-hydroxy cholecalciferol [Option ID = 1021]

**69) A heteropolysaccharide among the following is:**

**[Question ID = 261]**

1. Hyaluronic acid [Option ID = 1042]
2. Inulin [Option ID = 1044]
3. Glycogen [Option ID = 1043]
4. Cellulose [Option ID = 1041]

**Correct Answer :-**

**70) Propionyl CoA formed oxidation of fatty acids having an odd number of carbon atoms is converted into [Question ID = 259]**

1. Butyryl CoA [Option ID = 1034]
2. D-methylmalonyl CoA [Option ID = 1035]
3. Acetyl CoA [Option ID = 1033]
4. Acetoacetyl CoA [Option ID = 1036]

**Correct Answer :-**

- Acetyl CoA [Option ID = 1033]

**71) Starter cultures used for yoghurt manufacture are**

**[Question ID = 285]**

1. *Streptococcus thermophilus* and *Leuconostoc mesenteroides* [Option ID = 1140]
2. *Streptococcus thermophilus* and *Lactococcus lactis* [Option ID = 1138]
3. *Streptococcus thermophilus* and *Lactobacillus bulgarius* [Option ID = 1137]
4. *Lactococcus lactis* and *Leuconostoc mesenteroides* [Option ID = 1139]

**Correct Answer :-**

- *Streptococcus thermophilus* and *Lactobacillus bulgarius* [Option ID = 1137]

**72) Iatrogenic malnutrition is also termed as [Question ID = 300]**

1. Hospital malnutrition [Option ID = 1200]
2. Wasting syndrome [Option ID = 1198]
3. PEM [Option ID = 1197]
4. Protein energy wasting [Option ID = 1199]

**Correct Answer :-**

- PEM [Option ID = 1197]

**73) 1-hydroxylation of 25-hydroxy Vitamin D3 takes place in [Question ID = 254]**

1. Intestine [Option ID = 1016]
2. Kidney [Option ID = 1014]
3. Pancreas [Option ID = 1015]
4. Liver [Option ID = 1013]

**Correct Answer :-**

- Liver [Option ID = 1013]

**74) Cereals are deficient in**

**[Question ID = 288]**

1. Valine [Option ID = 1152]
2. Leucine [Option ID = 1150]
3. Lysine [Option ID = 1149]
4. Methionine [Option ID = 1151]

**Correct Answer :-**

75) What is the requirement of calcium during pregnancy as per ICMR, 2010

[Question ID = 228]

1. 1800 mg/day [Option ID = 909]
2. 1200 mg/day [Option ID = 910]
3. 1500 mg/day [Option ID = 911]
4. 1000 mg/day [Option ID = 912]

**Correct Answer :-**

- 1800 mg/day [Option ID = 909]

76) The following are fundamental elements of food and nutrition security

i. food availability

ii. food access

iii. food pigments

iv. food utilisation [Question ID = 299]

1. i ,iii, ii [Option ID = 1193]
2. iii ,iv, i [Option ID = 1196]
3. i ,ii, iv [Option ID = 1194]
4. ii ,iii, i [Option ID = 1195]

**Correct Answer :-**

- i ,iii, ii [Option ID = 1193]

77) The following gas is used to speed up the ripening process in fruits [Question ID = 292]

1. methane gas [Option ID = 1166]
2. Ethylene gas [Option ID = 1165]
3. Hydrogen gas [Option ID = 1168]
4. carbon dioxide gas [Option ID = 1167]

**Correct Answer :-**

- Ethylene gas [Option ID = 1165]

78) Which of the followings are problems encountered in pregnancy?

i. Nausea and vomiting

ii. Constipation

iii. Toxaemia

iv. Fluorosis [Question ID = 206]

1. i, ii, iv [Option ID = 823]
2. ii, iii, iv [Option ID = 822]
3. i, iii, iv [Option ID = 824]
4. i, ii, iii [Option ID = 821]

**Correct Answer :-**

- i, ii, iii [Option ID = 821]

79) Which of the following is one of the principles of fortification [Question ID = 233]

1. Supplementation [Option ID = 932]
2. Immunization [Option ID = 929]



3. Restoration [Option ID = 930]  
4. Diversification [Option ID = 931]

**Correct Answer :-**

- Immunization [Option ID = 929]

**80) Which of the following statement is correct for Diabetes mellitus [Question ID = 229]**

- Diabetes is a disease that can be cured [Option ID = 916]
- Diabetes is an endocrine disorder [Option ID = 915]
- Type 2 is prone to ketosis [Option ID = 914]
- Type 1 is not prone to ketosis [Option ID = 913]

**Correct Answer :-**

- Type 1 is not prone to ketosis [Option ID = 913]

**81) Which of the following statement is not true for antioxidants [Question ID = 250]**

- Vitamin A, C and E are examples of natural antioxidants [Option ID = 1000]
- Antioxidants cause oxidation enhancing reactive oxygen species [Option ID = 998]
- Antioxidants are free radicals that causes cell damage [Option ID = 999]
- Antioxidants are found in colored fruits and vegetables [Option ID = 997]

**Correct Answer :-**

- Antioxidants are found in colored fruits and vegetables [Option ID = 997]

**82) Which of the following statements regarding TCA cycle is true? [Question ID = 262]**

- It is amphibolic in nature [Option ID = 1047]
- It occurs in cytosol [Option ID = 1046]
- It contains no intermediate for Gluconeogenesis [Option ID = 1048]
- It is an anaerobic process [Option ID = 1045]

**Correct Answer :-**

- It is an anaerobic process [Option ID = 1045]

**83) Match the given enzymes to their substrate**

**Enzyme      Substrate**

- i. Saliva  $\alpha$ -amylase    a)  $\alpha$ -dextrin  
ii. Maltase                b) Triacylglycerol  
iii. Lingual lipase        c) Starch  
iv. Endopeptidase        d) Polypeptides  
[Question ID = 214]

- i-c, ii-d, iii-a, iv-b [Option ID = 856]
- i-c, ii-a, iii-b, iv-d [Option ID = 855]
- i-a, ii-c, iii-d, iv-b [Option ID = 854]
- i-c, ii-a, iii-d, iv-b [Option ID = 853]

**Correct Answer :-**

- i-c, ii-a, iii-d, iv-b [Option ID = 853]

**84) Match the following vitamins to their coenzymes**

**Vitamins      Coenzymes**

- i. Vitamin B3(Niacin)    a) PLP  
ii. Folic acid              b) Methyl cobalamin



[Question ID = 213]

1. i-a, ii-c, iii-d, iv-b [Option ID = 850]
2. i-c, ii-d, iii-a, iv-b [Option ID = 852]
3. i-c, ii-a, iii-d, iv-b [Option ID = 849]
4. i-c, ii-a, iii-b, iv-d [Option ID = 851]

**Correct Answer :-**

- i-c, ii-a, iii-d, iv-b [Option ID = 849]

**85) Biomolecules which are amino acids but are not used as building blocks for proteins are**

- i. Citrulline
- ii. Ornithine
- iii. Arginine
- iv. Alanine

[Question ID = 241]

1. Correct options are i and ii [Option ID = 961]
2. None of the above [Option ID = 964]
3. Correct options are ii, iii and iv [Option ID = 962]
4. Correct options are i, ii and iii [Option ID = 963]

**Correct Answer :-**

- Correct options are i and ii [Option ID = 961]

**86) Mechanical device used for drying food is**

[Question ID = 272]

1. Extruder [Option ID = 1088]
2. Lyophilizer [Option ID = 1086]
3. Tray Dryer [Option ID = 1087]
4. Evaporator [Option ID = 1085]

**Correct Answer :-**

- Evaporator [Option ID = 1085]

**87) Match the correct sources of Vital statistics:**

**Sources      Specifications**

- i. Census      a. Primarily data are collected through nation-wide household surveys on various socio-economic subjects, Annual Survey of Industries (ASI), etc.
- ii. Population Register      b. Provide data on mortality and morbidity for selected specific diseases.
- iii. National sample survey      c. To obtain such demographic information as current population size, internal migration, data on vital events etc.
- iv. Disease Register      d. This is the only source of primary data at village, town and ward level. It is normally carried out once in ten years.

[Question ID = 209]

1. i-d, ii-c, iii-a, iv-b [Option ID = 836]
2. i-c, ii-a, iii-d, iv-b [Option ID = 833]
3. i-a, ii-d, iii-c, iv-b [Option ID = 834]
4. i-d, ii-b, iii-a, iv-c [Option ID = 835]

Correct Answer :-

- i-c, ii-a, iii-d, iv-b [Option ID = 833]

**88) Pyruvate formed in glycolysis has three catabolic fates [Question ID = 218]**

1. All of the above [Option ID = 872]
2. Conversion to Ethanol [Option ID = 871]
3. Reduction to lactate [Option ID = 870]
4. Oxidation to acetyl CoA [Option ID = 869]

**Correct Answer :-**

- Oxidation to acetyl CoA [Option ID = 869]

**89) A multienzyme complex of citric acid cycle is [Question ID = 237]**

1. Pyruvate dehydrogenase [Option ID = 946]
2. Alpha-ketoglutarate dehydrogenase [Option ID = 948]
3. Aconitase [Option ID = 947]
4. Succinate dehydrogenase [Option ID = 945]

**Correct Answer :-**

- Succinate dehydrogenase [Option ID = 945]

**90) Emulsifiers are amphiphilic molecules and have the ability to reduce: [Question ID = 274]**

1. All of the above [Option ID = 1096]
2. Viscosity [Option ID = 1094]
3. Surface tension [Option ID = 1093]
4. Temperature [Option ID = 1095]

**Correct Answer :-**

- Surface tension [Option ID = 1093]

**91) Pernicious anaemia is caused due to the deficiency of which nutrient?**

**[Question ID = 304]**

1. Vitamin C [Option ID = 1213]
2. Vitamin B12 [Option ID = 1215]
3. Folic acid [Option ID = 1216]
4. Iron [Option ID = 1214]

**Correct Answer :-**

- Vitamin C [Option ID = 1213]

**92) The temperature in deep freezer is [Question ID = 271]**

1. None [Option ID = 1084]
2. 0 °C [Option ID = 1081]
3. -18 °C [Option ID = 1083]
4. 7 °C [Option ID = 1082]

**Correct Answer :-**

- 0 °C [Option ID = 1081]

93) Ketosis occurs due to

**[Question ID = 295]**

1. Increased lipolysis [Option ID = 1178]
2. Increased proteolysis [Option ID = 1177]
3. Decreased proteolysis [Option ID = 1179]
4. Decreased lipolysis [Option ID = 1180]

**Correct Answer :-**

- Increased proteolysis [Option ID = 1177]

**94) The component of energy expenditure include****[Question ID = 225]**

1. Dietary induced thermogenesis [Option ID = 898]
2. All of the above [Option ID = 900]
3. Physical activity [Option ID = 899]
4. Basal metabolic rate [Option ID = 897]

**Correct Answer :-**

- Basal metabolic rate [Option ID = 897]

**95) The bran, the germ and the endosperm are the three parts of****[Question ID = 265]**

1. Kernel of the cereal grain [Option ID = 1058]
2. Fruits [Option ID = 1059]
3. Vegetable [Option ID = 1057]
4. None of these [Option ID = 1060]

**Correct Answer :-**

- Vegetable [Option ID = 1057]

**96) The role of the teaching aids include:**

- i. Observation
- ii. Exploration
- iii. Understanding
- iv. Application

**[Question ID = 208]**

1. i, ii, iii [Option ID = 830]
2. ii, iii, iv [Option ID = 831]
3. i, ii, iv [Option ID = 829]
4. All of the above [Option ID = 832]

**Correct Answer :-**

- i, ii, iv [Option ID = 829]

**97) The management of microcytic hypochromic anaemia involves supplementation of**

- i. Ferrous sulphate, GLVs and Vitamin C
- ii. Iodine, Vitamin B12 and Vitamin B6



iii. Folic acid and vitamin B12

iv. Folic acid, Iodine, Iron and vitamin B12

**[Question ID = 251]**

1. Correct options are i and iii [Option ID = 1003]
2. Correct options are ii and iii [Option ID = 1002]
3. Correct options are i and iv [Option ID = 1001]
4. All of the above [Option ID = 1004]

**Correct Answer :-**

- Correct options are i and iv [Option ID = 1001]

**98) Candling is a method used to assess the quality of: [Question ID = 279]**

1. Fish [Option ID = 1115]
2. Milk [Option ID = 1113]
3. Meat [Option ID = 1114]
4. Egg [Option ID = 1116]

**Correct Answer :-**

- Milk [Option ID = 1113]

**99) Tissues form lactate from glucose. This process is termed as [Question ID = 263]**

1. Anaerobic glycolysis [Option ID = 1050]
2. Aerobic glycolysis [Option ID = 1049]
3. Oxidative phosphorylation [Option ID = 1051]
4. Oxidation [Option ID = 1052]

**Correct Answer :-**

- Aerobic glycolysis [Option ID = 1049]

**100) Diet of the patient is modified according to [Question ID = 230]**

1. Disease and its severity [Option ID = 917]
2. Nutritional status of the patient [Option ID = 918]
3. Metabolic changes [Option ID = 919]
4. All of the above [Option ID = 920]

**Correct Answer :-**

- Disease and its severity [Option ID = 917]