**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] 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]

| 10) Pasteurisation is a process by which                          | :h: [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                      | D = 1100]   |
| Correct Answer :-   |   |
| • Milk is condensed [Option ID = 1097]                            |   |
| 11) The active principle present in turn                          | neric 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 organ? [Question ID = 258] | n fatty acid oxidation products by which of the following |
| 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 compour                             | nds 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 inclu                         | udo i   |
| [Question ID = $278$ ]  |   |
| 1. Both sterilisation and inhibition of sproutir                  | $p_{\rm R}$ [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 :-   |   |
|   |   |

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] Temperature [Option ID = 1061] 3. 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]

| ) Ornithine transcarbamoylase reaction of urea cycle occurs in the [Question ID]  | = 242] |
|---|--------|
| Mitochondrial Matrix [Option ID = 966]  | -      |
| None of the above [Option ID = $968$ ]  |        |
| Nucleus [Option ID = $967$ ]  |        |
| Cytosol [Option ID = 965]   |        |
| prrect Answer :-  |        |
| Cytosol [Option ID = 965]   |        |
| ) Forms of Discussion method include:   |        |
| Forum   |        |
| Buzz session  |        |
| Demonstration   |        |
| Role play [Question ID = 207]   |        |
| i and ii are correct [Option ID = 825]  |        |
| i and iii are correct [Option ID = 827]   |        |
| ii and iii are correct [Option ID = 826]  |        |
| i, ii, iii and iv are correct [Option ID = 828]   |        |
| prrect Answer :-  |        |
| i and ii are correct [Option ID = $825$ ]   |        |
| kidney failure [Option ID = 817]<br>cardiovascular disease [Option ID = 820]<br>anorexia [Option ID = 819]<br>bulimia [Option ID = 818] |        |
| kidney failure [Option ID = 817]  |        |
| ) Examples of insulin antagonist hormones are<br>Glucagon<br>Epinephrine<br>Oestrogen [Question ID = 222]                               |        |
| Correct options are i, ii and iii [Option ID = 887]   |        |
| None of the above [Option ID = 888]   |        |
| Correct options are i and ii [Option $ID = 885$ ]   |        |
| Correct options are ii and iii [Option ID = 886]  |        |
| prrect Answer :-  |        |
| Correct options are i and ii [Option ID = 885]  |        |
| ) Aromatic foods include [Question ID = 269]  |        |
|   |        |
| Herbs [Option ID = $1074$ ]<br>Spices [Option ID = $1073$ ]   |        |
| Spices [Option ID = 1073]   |        |
| Seasoning [Option ID = $1075$ ]   |        |

• 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]

| Correct Answ               |   |
|----------------------------|---|
| Lymphatic tis              | ssues present in the stomach [Option ID = 989]                                  |
| 35) The enzy               | me responsible for curdling of milk is [Question ID = $283$ ]                   |
| 1. Tannin [Op              | tion ID = 1129]   |
|                            | tion ID = 1131]   |
| • - •                      | tion ID = $1132$ ]  |
| 4. Rennin [Opti            | on ID = 1130]   |
| Correct Answ               | er :-   |
| Tannin [Op                 | tion ID = 1129]   |
| 36) The follow             | wing does not have phosphorous [Question ID = $255$ ]                           |
| 1. NAD <sup>+</sup> [Optic | n ID = 1018]  |
| 2. TPP [Option]            | [D = 1019]  |
| -                          | ption ID = 1017]  |
| 4. CoASH [Optio            | on ID = 1020]   |
| Correct Answ               |   |
| Riboflavin [C              | ption ID = 1017]  |
| 37) The carbo              | on atom source while producing urea in the urea cycle is [Question ID = $238$ ] |
| 1. Aspartic acid           | [Option ID = 951]   |
| 2. Glucose [Opt            | -   |
| 3. CO <sub>2</sub> [Option | -   |
| 4. Arginine [Opt           | ion ID = 952]   |
| Correct Answ               |   |
| CO <sub>2</sub> [Option    | ID = 949]   |
| 38) Sponav b               | leeding gums is caused by which nutrient deficiency?                            |
| [Question ID :             |   |
| 1. Iron [Option            |   |
| 2. Vitamin C [O            | -   |
| _                          | ption ID = 984]   |
|                            | [Option ID = 983]   |
| Correct Answ               | er :-   |
| Iron [Optio                | n ID = 981]   |
| 39) Lard is [Q             | uestion ID = 294]   |
| 1. an animal fa            | at from cow [Option ID = 1173]  |
| •                          | om groundnut [Option ID = 1176]   |
|                            | from hogs [Option ID = 1174]  |
| 4. a plant fat f           | rom soyabean [Option ID = 1175]   |
|                            |   |
| Correct Answ               | er :-<br>at from cow [Option ID = 1173]   |

| T                 | and some stand and in collected to the black [Outline TD = 1000]   |
|-------------------|--|
| •                 | newly synthesized sphingolipids to the blood [Option ID = 1039]<br>fatty acids into the mitochondrion [Option ID = 1040] |
| •                 | esterol from its site of synthesis in the endoplasmic reticulum to the plasma membrane.                                  |
| [Option ID =      |  |
| I. To aid in the  | assembly of chylomicrons [Option ID = 1037]  |
| Correct Answ      | r :-   |
| To aid in th      | e assembly of chylomicrons [Option ID = 1037]  |
| 1) Normal o       | molarity of body fluids is: [Question ID = 231]  |
| . 600 mOsm/L      | Option ID = 922]   |
|                   | [Option ID = 921]  |
| 8. 150 mOsm/L     | [Option ID = 924]  |
| ł. 1000 mOsm/     | [Option ID = 923]  |
| Correct Answe     |  |
| 300 mOsm/         | _ [Option ID = 921]  |
| 2) HACCP st       | ands for [Question ID = 270]   |
|                   | Critical Control Pressure [Option ID = 1080]   |
|                   | Critical Control Parameter [Option ID = 1078]  |
|                   | is Critical Control Parameter [Option ID = 1079]   |
| Analy             | is Critical Control Point [Option ID = 1077]   |
| Correct Answ      |  |
| Hazard Analy      | sis Critical Control Point [Option ID = 1077]  |
| 3) ISO 1400       | ) is a family of standards related to : [Question ID = 290]  |
| . Marketing ma    | nagement [Option ID = 1159]  |
| 2. Manufacturin   | management [Option ID = $1158$ ]   |
|                   | nanagement [Option ID = $1157$ ]   |
| I. All of the abo | /e [Option ID = 1160]  |
| Correct Answe     |  |
| Environment       | management [Option ID = 1157]  |
| -                 | mperature due to infection rises to 39 <sup>0</sup> C, then the BMR will rise by: [Question ID                           |
| 247]              |  |
| . 28% [Optio      | ID = 987]  |
| 2. 7% [Option     | -  |
| 3. 56% [Option    | -  |
| I. 14% [Optio     | n ID = 986]  |
| Correct Answe     |  |
| 7% [Option        | נסא = חו   |
| l5) Cardiac h     | eri-beri occurs due to   |
| S Carular D       |  |
|                   |  |

| 2. Thiamine deficiency [Option ID =<br>3. Goitre [Option ID = 927]              | = 926]   |
|---|--|
| 4. Marasmus [Option ID = 925]   |  |
| Correct Answer :-   |  |
| • Marasmus [Option ID = 925]  |  |
| 16) The Vitamin D has an impo   | rtant functions to play : [Question ID = 211]          |
| 1. In the Bone [Option ID = 842]  |  |
| 2. In the Intestine [Option ID = $843$  | 3]   |
| 3. In the Kidney [Option ID = $841$ ]<br>4. All of the above [Option ID = $844$ | 4]   |
|   | -  |
| <ul><li>Correct Answer :-</li><li>In the Kidney [Option ID = 841]</li></ul>     |  |
|   |  |
| 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 foo  | od is  |
| [Question ID = 282]   |  |
| 1. Annatto [Option ID = 1125]   |  |
| 2. Indigo caramine [Option ID =   | 1127]  |
| 3. Tartrazine [Option ID = 1126]  |  |
| 4. Metanil yellow [Option ID = 1128   | 3]   |
| Correct Answer :-   |  |
| <ul> <li>Annatto [Option ID = 1125]</li> </ul>                                  |  |

| <ol> <li>Assertion and reason both are correct [Option ID = 878]</li> <li>Assertion and reason both are incorrect [Option ID = 880]</li> </ol> |                                      |
|--|--------------------------------------|
| 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.<br>Reason: Egg yolk serves as an emulsifying agent in prepa<br>284]                    | ration of mayonnaise. [Question ID = |
| 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<br>Reason: Proline has a secondary amine group [Question ]   | D = 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 :-  |                                      |
| <ul> <li>Assertion is correct but reason is incorrect [Option ID = 973]</li> </ul>   |                                      |
| 53) Assertion: Enzymes are biocatalysts that accelerate r<br>Reason: Enzymes lower the activation energy of a reactio                          |                                      |
| 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 :-  |                                      |
| <ul> <li>Assertion is correct but reason is incorrect [Option ID = 873]</li> </ul>   |                                      |
| 54) Assertion: Glycolysis is an energy yielding process<br>Reason: Glycolysis of one molecule glucose yields 2 molec<br>[Question ID = 221]    | cules of pyruvate, ATP and NADH each |
| 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]   |                                      |

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] Keep yolk in position [Option ID = 1065] 4. **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] ٠ 60) Which of the following is NOT the function of vitamin C [Question ID = 212] 1. Immune function [Option ID = 847]

Energy metabolism [Option ID = 846]
 Antioxidant activity [Option ID = 848]

| Correct Answer :-  |  |
|--|--|
| Collagen synthesis [Option   | on ID = 845]   |
| 51) An amino acid that o   | destabilizes an alpha-helix is [Question ID = 224]   |
| 1. Proline [Option ID = 893]   | ]  |
| 2. Threonine [Option ID = 8  | -  |
| 3. Alanine [Option ID = 894  | -  |
| 4. Asparagine [Option ID =   | 895]   |
| Correct Answer :-  |  |
| • Proline [Option ID = 893   | 3]   |
| 52) Vitamin required by  | transaminases is [Question ID = 239]   |
| 1. Pyridoxine [Option ID =   |  |
| 2. Thiamine [Option ID = $9!$  |  |
| 3. Ascorbic acid [Option ID<br>4. Riboflavin [Option ID = 9  |  |
|  |  |
| Correct Answer :-  |  |
| Pyridoxine [Option ID =  | = 953]   |
| Reason: Neural tube defe   | entation of dietary folate is necessary during pregnancy<br>ects in the foetus is caused due to deficiency of folic acid.  |
| Reason: Neural tube defe<br>[Question ID = 296]<br>1. Assertion correct reason i   | ects in the foetus is caused due to deficiency of folic acid.<br>incorrect [Option ID = 1181]  |
| Reason: Neural tube defe<br>[Question ID = 296]<br>1. Assertion correct reason i<br>2. Assertion incorrect reasor  | ects in the foetus is caused due to deficiency of folic acid.<br>incorrect [Option ID = 1181]<br>n correct [Option ID = 1183]  |
| Reason: Neural tube defe<br>[Question ID = 296]<br>1. Assertion correct reason i<br>2. Assertion incorrect reason<br>3. Assertion and reason bot   | ects in the foetus is caused due to deficiency of folic acid.<br>incorrect [Option ID = 1181]  |
| Reason: Neural tube defe<br>[Question ID = 296]<br>1. Assertion correct reason in<br>2. Assertion incorrect reason<br>3. Assertion and reason both<br>4. Assertion and reason both   | ects in the foetus is caused due to deficiency of folic acid.<br>incorrect [Option ID = 1181]<br>n correct [Option ID = 1183]<br>h correct [Option ID = 1182]  |
| Reason: Neural tube defo<br>[Question ID = 296]<br>1. Assertion correct reason in<br>2. Assertion incorrect reason<br>3. Assertion and reason both<br>4. Assertion and reason both<br>5. Correct Answer :-   | ects in the foetus is caused due to deficiency of folic acid.<br>incorrect [Option ID = 1181]<br>n correct [Option ID = 1183]<br>h correct [Option ID = 1182]  |
| Reason: Neural tube defo<br>[Question ID = 296]<br>1. Assertion correct reason in<br>2. Assertion incorrect reason<br>3. Assertion and reason both<br>4. Assertion and reason both<br>5. Correct Answer :-   | ects in the foetus is caused due to deficiency of folic acid.<br>incorrect [Option ID = 1181]<br>n correct [Option ID = 1183]<br>h correct [Option ID = 1182]<br>h incorrect [Option ID = 1184]  |
| Reason: Neural tube defe<br>[Question ID = 296]<br>1. Assertion correct reason in<br>2. Assertion incorrect reason<br>3. Assertion and reason both<br>4. Assertion and reason both<br><b>Correct Answer :-</b><br>• Assertion correct reason<br><b>64) Assertion: Essential<br/>Reason: Essential fatty a</b>  | ects in the foetus is caused due to deficiency of folic acid.<br>incorrect [Option ID = 1181]<br>n correct [Option ID = 1183]<br>h correct [Option ID = 1182]<br>h incorrect [Option ID = 1184]<br>incorrect [Option ID = 1181]  |
| Reason: Neural tube defe<br>[Question ID = 296]<br>1. Assertion correct reason in<br>2. Assertion incorrect reason<br>3. Assertion and reason both<br>4. Assertion and reason both<br>5. Assertion correct reason<br>5. Assertion correct reason<br>5. Assertion: Essential<br>Reason: Essential fatty a<br>in the diet  | ects in the foetus is caused due to deficiency of folic acid.<br>incorrect [Option ID = 1181]<br>n correct [Option ID = 1183]<br>h correct [Option ID = 1182]<br>h incorrect [Option ID = 1184]<br>incorrect [Option ID = 1181]<br>fatty acids Linoleic acid and Linolenic acid help in reduction of CVDs  |
| Reason: Neural tube defe<br>[Question ID = 296]<br>1. Assertion correct reason in<br>2. Assertion incorrect reason<br>3. Assertion and reason both<br>4. Assertion and reason both<br><b>Correct Answer :-</b><br>• Assertion correct reason<br><b>64) Assertion: Essential<br/>Reason: Essential fatty a<br/>in the diet</b><br>[Question ID = 297]<br>1. Assertion correct reason in<br>1. Asserti | ects in the foetus is caused due to deficiency of folic acid.<br>incorrect [Option ID = 1181]<br>n correct [Option ID = 1182]<br>h correct [Option ID = 1182]<br>h incorrect [Option ID = 1184]<br>incorrect [Option ID = 1181]<br>fatty acids Linoleic acid and Linolenic acid help in reduction of CVDs<br>acids are synthesized within the body and are not necessary to be taken<br>incorrect [Option ID = 1185]                                 |
| Reason: Neural tube defe         Question ID = 296]         1. Assertion correct reason incorrect reason         2. Assertion incorrect reason         3. Assertion and reason both         4. Assertion and reason both         4. Assertion and reason both         5. Assertion and reason both         6. Assertion and reason both         7. Assertion correct reason         6. Assertion correct reason         6. Assertion: Essential         7. Assertion ID = 297]         1. Assertion correct reason         6. Assertion incorrect reason   | ects in the foetus is caused due to deficiency of folic acid.<br>incorrect [Option ID = 1181]<br>n correct [Option ID = 1183]<br>h correct [Option ID = 1184]<br>incorrect [Option ID = 1184]<br>fatty acids Linoleic acid and Linolenic acid help in reduction of CVDs<br>here a synthesized within the body and are not necessary to be taken<br>incorrect [Option ID = 1185]<br>n correct [Option ID = 1187]                                      |
| Reason: Neural tube defe         Question ID = 296]         1. Assertion correct reason in         2. Assertion incorrect reason         3. Assertion and reason both         4. Assertion and reason both         5. Assertion and reason both         6. Assertion and reason both         7. Assertion and reason both         7. Assertion correct reason         6.4) Assertion correct reason         6.4) Assertion: Essential         Reason: Essential fatty a         n the diet         7. Question ID = 297]         1. Assertion correct reason         2. Assertion incorrect reason         3. Assertion and reason both  | ects in the foetus is caused due to deficiency of folic acid.<br>incorrect [Option ID = 1181]<br>n correct [Option ID = 1182]<br>h correct [Option ID = 1182]<br>h incorrect [Option ID = 1184]<br>incorrect [Option ID = 1181]<br>fatty acids Linoleic acid and Linolenic acid help in reduction of CVDs<br>acids are synthesized within the body and are not necessary to be taken<br>incorrect [Option ID = 1185]                                 |
| Reason: Neural tube defe         Question ID = 296]         1. Assertion correct reason         2. Assertion incorrect reason         3. Assertion and reason both         4. Assertion and reason both         5. Assertion and reason both         6. Assertion and reason both         7. Assertion and reason both         7. Assertion correct reason         6. Assertion correct reason         6. Assertion incorrect reason         6. Assertion ID = 297]         1. Assertion incorrect reason         2. Assertion and reason both         3. Assertion and reason both         4. Assertion and reason both         5. Assertion and reason both  | ects in the foetus is caused due to deficiency of folic acid.<br>incorrect [Option ID = 1181]<br>n correct [Option ID = 1183]<br>h correct [Option ID = 1182]<br>h incorrect [Option ID = 1184]<br>fatty acids Linoleic acid and Linolenic acid help in reduction of CVDs<br>acids are synthesized within the body and are not necessary to be taken<br>incorrect [Option ID = 1185]<br>n correct [Option ID = 1187]<br>h correct [Option ID = 1186] |
| Reason: Neural tube deformation ID = 296]  1. Assertion ID = 296]  1. Assertion incorrect reason in the constraint of the assertion and reason both 2. Assertion and reason both 3. Assertion and reason both 4. Assertion and reason both 5. Assertion correct reason 5. Assertion correct reason 5. Assertion ID = 297] 1. Assertion incorrect reason 3. Assertion incorrect reason 3. Assertion and reason both 4. Assertion and reason both 5. Assertion and reason both 5. Assertion incorrect reason 5. Assertion and reason both 5. Assertion and r   | ects in the foetus is caused due to deficiency of folic acid.<br>incorrect [Option ID = 1181]<br>n correct [Option ID = 1183]<br>h correct [Option ID = 1182]<br>h incorrect [Option ID = 1184]<br>fatty acids Linoleic acid and Linolenic acid help in reduction of CVDs<br>acids are synthesized within the body and are not necessary to be taken<br>incorrect [Option ID = 1185]<br>n correct [Option ID = 1187]<br>h correct [Option ID = 1186] |

| <ol> <li>Anthoxanthins [Option ID = 1118]</li> <li>Carotenoid [Option ID = 1120]</li> <li>Anthocyanins [Option ID = 1119]</li> </ol>  |  |
|---|--|
| Correct Answer :-<br>• Lycopenes [Option ID = 1117]   |  |
| 66) Zinc is an important micronutrient t<br>illness [Question ID = 249]   | hat helps in the reduction of the severity of the following  |
| <ol> <li>Diarrhoea [Option ID = 994]</li> <li>All of the above [Option ID = 996]</li> <li>Typhoid [Option ID = 995]</li> <li>Common cold [Option ID = 993]</li> </ol>   |  |
| Correct Answer :-<br>• Common cold [Option ID = 993]  |  |
| iii. Modular formulas c. Provide nitrog   | nutrient predominates<br>IFA, & beta-carotene are added<br>Jen as whole protein<br>e nitrogen from crystalline amino acids |
| [Question ID = 298]   |  |
| 1. i-b; ii-c; iii-d; iv-a [Option ID = 1189]<br>2. i-d ; ii-c; iii-a ; iv-b [Option ID = 1191]<br>3. i-d; ii-a; iii- c ; iv-b [Option ID = 1192]<br>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]   |  |
| <ol> <li>25-hydroxy cholecalciferol [Option ID = 10</li> <li>1-hydroxy cholecalciferol [Option ID = 102</li> <li>1, 25-dihydroxy cholecalciferol [Option ID =</li> <li>24, 25-dihydroxy cholecalciferol [Option ID</li> </ol> | 1]<br>= 1024]  |
| <ul> <li>Correct Answer :-</li> <li>1-hydroxy cholecalciferol [Option ID = 10]</li> </ul>   | 21]  |
| 69) A heteropolysaccharide among the  | following is:  |
| [Question ID = 261]   | -  |
| <ol> <li>Hyaluronic acid [Option ID = 1042]</li> <li>Inulin [Option ID = 1044]</li> <li>Glycogen [Option ID = 1043]</li> <li>Cellulose [Option ID = 1041]</li> </ol>  |  |
| Correct Apswer  |  |

| 0) Propionyl CoA formed oxidation of fatty acids having an odd number of ca                | rbon atoms is |
|--|---------------|
| onverted into [Question ID = 259]  |               |
| Butyryl CoA [Option ID = 1034]   |               |
| . D-methylmalonyl CoA [Option ID = 1035]   |               |
| Acetyl CoA [Option ID = $1033$ ]   |               |
| Acetoacetyl CoA [Option ID = 1036]   |               |
| orrect Answer :-   |               |
| Acetyl CoA [Option ID = 1033]  |               |
| 1) Starter cultures used for yoghurt manufacture are                                       |               |
| Question ID = 285]   |               |
| <i>Streptococcus thermophillus</i> and <i>Leuconostoc mesenteroides</i> [Option ID = 1140] |               |
| . Streptococcus thermophillus and Lactococcus lactis [Option ID = 1138]                    |               |
| . <i>Streptococcus thermophillus</i> and <i>Lactobacillus bulgarius</i> [Option ID = 1137] |               |
| . <i>Lactococcus lactis</i> and <i>Leuconostoc mesenteroides</i> [Option ID = 1139]        |               |
| orrect Answer :-   |               |
| <i>Streptococcus thermophillus</i> and <i>Lactobacillus bulgarius</i> [Option ID = 1137]   |               |
| 2) Iatrogenic malnutrition is also termed as [Question ID = 300]                           |               |
| . Hospital malnutrition [Option ID = $1200$ ]  |               |
| . Wasting syndrome [Option ID = 1198]  |               |
| PEM [Option ID = 1197]   |               |
| . Protein energy wasting [Option ID = $1199$ ]   |               |
| orrect Answer :-   |               |
| $PEM \ [Option \ ID = 1197]$   |               |
| 3) 1-hydroxylation of 25-hydroxy Vitamin D3 takes place in [Question ID = $2$              | 254]          |
| . Intestine [Option ID = 1016]   |               |
| Kidney [Option ID = $1014$ ]   |               |
| Pancreas [Option ID = 1015]  |               |
| . Liver [Option ID = 1013]   |               |
| orrect Answer :-   |               |
| Liver [Option ID = 1013]   |               |
| 4) Cereals are deficient in  |               |
| Question ID = 288]   |               |
|  |               |
| . Valine [Option ID = 1152]  |               |
|  |               |
| Leucine [Option ID = 1150]<br>Lysine [Option ID = 1149]                                    |               |

#### 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]

| Correct Answer :-<br>Immunization [Option ID = 929]  |           |
|--|-----------|
| 0) Which of the following statement is correct for Diabetes mellitus [Question   | - 2201    |
|  | 10 - 229] |
| . Diabetes is a disease that can be cured [Option ID = 916]<br>. 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]   |           |
| 1) 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]  |           |
| <ul> <li>It occurs in cytosol [Option ID = 1046]</li> <li>It contains no intermediate for Gluconeogenesis [Option ID = 1048]</li> <li>It is an anaerobic process [Option ID = 1045]</li> </ul> |           |
| Forrect Answer :-  |           |
| It is an anaerobic process [Option ID = 1045]  |           |
| 3) Match the given enzymes to their substrate  |           |
| nzyme Substrate  |           |
| Saliva —α-amylase a) α-dextrin<br>. Maltase b) Triacylglycerol   |           |
| i. Lingual lipase c) Starch  |           |
| /. 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]   |           |
| -  |           |
| <b>Forrect Answer :-</b><br>i-c, ii-a, iii-d, iv-b [Option ID = 853]   |           |

iii. Pyridoxine c) NAD and NADP iv. Vitamin B12 d) THFA [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** a. Primarily data are collected through nation-wide household surveys on various i. Census 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]

• 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. Observationii. Explorationiii. Understandingiv. 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]