

Test Booklet Serial No.	101785
Test Booklet Code	BCA

Candidate's Roll No.						
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Time: 2 hours

Maximum Marks: 100

Read the following instructions carefully before you begin to answer the questions.
This Booklet contains questions in English only

WRITTEN TEST FOR THE POST OF JUNIOR DIETICIAN – AUGUST 2014

INSTRUCTIONS TO CANDIDATES:

1. Before you start please check whether:

a. **The Test Booklet Serial No. and the OMR Answer Sheet Serial No. are same.**

b. All the pages in the question book are in order, and intact; and

c. Questions 1 to 100 are available.

Note: If you find any defect/s in the above mentioned points in this Test Booklet/OMR Sheet, you must inform the Invigilator and get both of them replaced with another set immediately.

2. Use only the **BLACK/BLUE BALL POINT PEN** that is provided to you to write/mark in the answer sheet.

3. Write your Roll Number in the box above.

4. This Booklet contains 100 questions

5. All the questions carry equal marks. Each Correct response will be given 1 (One) mark.

6. Negative marks will be there for wrong answers. 0.25 marks will be deducted for each wrong answer.

7. You have to use only the OMR Answer Sheet which is given along with this Question Booklet for answering the questions. You must complete the details in the prescribed places in the OMR Answer Sheet failing which your OMR Answer Sheet will not be evaluated.

8. The questions are of multiple-choice type. **FOUR** suggested answers **A, B, C** and **D** follow each question. Only one of them is the most appropriate. Select the most appropriate answer and **DARKEN THE CORRESPONDING OVAL IN THE ANSWER SHEET**. For eg:



9. **ONLY ONE** answer is to be darkened for each question. No correction is feasible as the marking is to be done with pen. Marking of wrong options as well as multiple markings will be treated as wrong and negative marks will be awarded accordingly.

10. As the Answer Sheet will be evaluated by a machine only, the marking of the answers by shading of the ovals may be done carefully.

12. Rough work **should not be done on the answer sheet or in the Question Booklet** other than in the 'Space for Rough Work' provided at the end of the Question Booklet.

13. Mobile phones, wireless communication devices or any other devices/equipments are completely banned within the examination halls/rooms. Candidates are advised not to bring any such devices/equipments into the examination hall/room even by switching them off as these will not be permitted inside the hall/room. The candidature of those candidates who do not comply with these instructions will be cancelled without further notice and they will not be allowed to appear in the written test.

14. This booklet should be **RETURNED INTACT** at the end of the examination failing which the candidature of the candidates will be cancelled without intimation and his/her Answer Sheet will not be evaluated.

Verified
Correct
SM

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- 1) Parenteral nutrition: select the one false statement below
 - a) Is useful when enteral nutrition is not an option.
 - ☒ b) Is indicated in a patient eating less than 70% of RDI
 - c) Can be complicated by severe infection.
 - d) Can be complicated by hyperglycaemia.

- 2) Re-feeding syndrome: select the single best answer below
 - a) Is result of high phosphate.
 - b) Occurs several months after feeding commences.
 - ☒ c) Can be prevented with thiamine before starting feeds.
 - d) Never occurs in obese patients.

- 3) Vitamin D: select the one true statement below
 - a) Cannot be synthesized by the body in sufficient amounts.
 - b) Active form is 25-hydroxycholecalciferol.
 - ☒ c) Principal role is in calcium homeostasis.
 - d) Is a recognized teratogen

- 4) We have the potential to increase our bone density until we reach the age of:
 - a) 20
 - ☒ b) 30
 - c) 40
 - d) 50

- 5) Which of the following is a good source of vitamin K?
 - a) Milk
 - ☒ b) Broccoli
 - c) Whole grains
 - d) Peanut butter

- 6) All the following have increased intake requirements during pregnancy except
 - a) Iron.
 - ☒ b) Calcium.
 - c) Vitamin a.
 - d) Vitamin C.

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- 7) Identify the toxic substance to infants and children that is found in the pipes and paint of older homes.
- a) copper
 - ☒ b) lead
 - c) sodium
 - d) iron
- 8) Which food should never be fed to an infant in any amount?
- a) water
 - b) juice
 - c) sugar
 - ☒ d) honey
- 9) Which of the following foods would be a choking hazard for a toddler?
- a) Banana
 - b) Cheese
 - ☒ c) Raisins
 - d) Crackers (Biscuits)
- 10) Cow's milk can be introduced to a child at what age?
- a) 6 months
 - ☒ b) 12 months
 - c) 18 months
 - d) 24 months
- 11) What hormone is associated with increased hunger?
- a) Leptin
 - ☒ b) Ghrelin
 - c) Estrogen
 - d) Cholecystokinin
- 12) What temperature should the water be for manual dishwashing?
- a) Must be at least 70°F (21°C)
 - b) Must be at least 90°F (32°C)
 - c) Must be at least 100°F (37°C)
 - ☒ d) Must be at least 110°F (43°C)

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- 13) What is the minimum internal temperature hot food must be held at to prevent pathogens from growing?
- a) 115°F (46°C)
 - b) 125°F (51°C)
 - ☒ c) 135°F (57°C)
 - d) 145°F (62°C)
- 14) Vegetables/fruits rich in thiols which prevent cancer are found in:
- a) Orange
 - b) Blue berry
 - c) Carrot
 - ☒ d) Cabbage
- 15) How much calorie one gram of body protein yield ?
- a) 3 kcal/g
 - ☒ b) 4 kcal/g
 - c) 6 kcal/g
 - d) 9 kcal/g
- 16) One Calorie equals to
- ☒ a) 4.184 J
 - b) 4.170 J
 - c) 4.150 J
 - d) 4.125 J
- 17) Energy needed for a heavy worker weighing 60 kg. is.
- a) 3000 Kcal
 - b) 3500 Kcal
 - c) 3600 Kcal
 - ☒ d) 3800 Kcal
- 18) Hundred gms of parboiled rice gives you protein of
- a) 5 gms.
 - b) 6 gms.
 - c) 6.2 gms.
 - ☒ d) 6.4 gms.

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19) Normal full fluid diet gives you

- ☒ a) 1200 Kcal and 35 gms of protein.
- b) 1500 Kcal and 40 gms of protein
- c) 1000 kcal and 30 gms of protein
- d) 2000 kcal and 50 gms of protein

20) Packed lunch should meet

- ☒ a) One-third daily requirement
- b) Two-third daily requirement
- c) Half of daily requirement
- d) None of the above

21) Repeated washing of vegetables will result in loss of

- ☒ a) Thiamine
- b) Arginine
- c) Carotene
- d) Biotin

22) Which cooking method adds more calories ?

- a) Steaming
- b) Poaching
- ☒ c) Frying in oil
- d) Baking in oven

23) Toxin linamarin is found in

- ☒ a) Cassava
- b) Star fish
- c) Fava beans
- d) Lathyrus sativus

24) Soyabean is rich in

- a) Minerals
- b) Fatty acids
- ☒ c) Amino acids
- ☒ d) Phyto estrogen

2 answers are correct
(c) amino acids
(d) phyto estrogens

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- 25) Fatty acid not synthesized in man is
- a) Oleic
 - b) Steric
 - c) Palmitic
 - ☒ d) Linoleic
- 26) The protein content of 100 ml of human milk is
- ☒ a) 1.1g
 - b) 2.1 g
 - c) 3.2 g
 - d) 4.3 g
- 27) Which is not a iron rich food?
- a) Spinach
 - ☒ b) Milk
 - c) Lentil
 - d) Beef
- 28) How much amount of fibre is recommended by NIN for Diabetic mellitus?
- a) 10 to 20 gms.
 - b) 15 to 25 gms.
 - ☒ c) 30 to 40 gms.
 - d) 50 to 60 gms.
- 29) Plantain contains
- a) Anti Goitrogen.
 - b) Anti-carcinogenic agent.
 - ☒ c) Anti-ulcerogenic agent.
 - d) Anti-thyroid substance
- 30) Which one of the following contains highest percentage of saturated fat?
- a) Butter.
 - b) Ghee
 - c) Coconut oil
 - ☒ d) Margarine hard.
- 31) Pellagra is caused by the deficiency of which vitamin
- a) Ascorbic acid
 - b) Thiamine
 - ☒ c) Niacin
 - d) Pridoxine

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32) Zinc deficiency results in:

- a) Enlarged genitalia
- b) Acne vulgaris
- ☒ c) Stunted growth
- d) Atherosclerosis

33) Tryptophan aminoacid promotes sleep. This is probable, because it is a precursor of:

- a) Serotonin
- ☒ b) Melatonin
- c) Tryptazol
- d) Tryptase

34) Which of the following amino acids has the highest nitrogen content per mole?

- ☒ a) Arginine
- b) Asparagine
- c) Glutamine
- d) Ornithine

35) How many calories are in 10 grams of alcohol?

- a) 40
- ☒ b) 70
- c) 90
- d) 100

36) Magnesium is helpful for

- a) Proper digestion
- b) Calcium absorption
- ☒ c) Nerve stimulation
- d) Synthesis of haemoglobin

37) Mottling of teeth occurs with excess ingestion of

- a) Selenium
- b) Cadmium
- ☒ c) Fluoride
- d) Chloride

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- 38) Which one of the following mineral deficiency leads on to hypertension ?
- a) sodium
 - b) chloride
 - ☒ c) calcium
 - d) magnesium
- 39) Iron is a component of the protein, _____, that binds and transports oxygen in the bloodstream.
- a) ferritin
 - b) hematocrit
 - ☒ c) hemoglobin
 - d) myoglobin
- 40) If Body fat is stored in cells called:
- ☒ a) Adipocytes
 - b) Glycogen
 - c) Lipoprotein lipase
 - d) Leptin cells
- 41) Alcoholic hepatitis can affect _____ function in the body.
- ☒ a) Liver
 - b) kidney
 - c) pancreatic
 - d) cardiac
- 42) Unlimited quantities of body energy can be stored in
- a) Glucose
 - b) Aminoacids
 - c) Cholesterol
 - ☒ d) Triglycerides
- 43) If the fat contains mostly Unsaturated fatty acids, it remains at room temperature as
- a) Soft
 - b) Solid
 - ☒ c) Liquid
 - d) Rancid

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44) Which one of the following is major source of Lactose?

- a) Butter
- ☒ b) Butter milk
- c) Broccoli
- d) Honey

45) All the following are very good source of Cholesterol except

- ☒ a) Pea nut butter
- b) Turkey meat
- c) whole milk
- d) Butter milk

46) Which of the following most contributes to acne?

- a) Protein foods
- b) Fried foods
- c) Chocolate
- ☒ d) Hormonal changes of puberty

47) Which of the following conditions can occur as a result of being overweight?

- a) Anemia
- b) Cirrhosis
- c) Osteoporosis
- ☒ d) Sleep apnea

48) When can a food handler diagnosed with jaundice return to work?

- a) After 1 week
- b) When his or her skin returns to a natural color
- c) Seven days after the last symptom is observed
- ☒ d) When approved by the regulatory authority

49) How much percentage of sodium is absorbed from diet at intestinal tract

- a) 40%
- ☒ b) 100%
- c) 60%
- d) 20%

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- 50) During which of the following trimesters is the baby most vulnerable to teratogens?
- ☒ a) The baby is equally vulnerable during all trimesters.
 - b) first
 - c) third
 - d) second
- 51) Which one of these vitamins is involved in controlling cell differentiation and proliferation?
- a) Vitamin B
 - ☒ b) Vitamin D
 - c) Vitamin E
 - d) Vitamin K
- 52) Which one of these vitamins has a role in oxidation and reduction reactions?
- a) Biotin
 - b) Folate
 - ☒ c) Riboflavin
 - d) Pantothenic acid
- 53) Which one of these vitamins may mask the anaemia of vitamin B₁₂ deficiency?
- a) Biotin
 - ☒ b) Folate
 - c) Thiamin
 - d) Riboflavin
- 54) Which of the following vitamins provides the cofactor for pyruvate dehydrogenase?
- a) Folate
 - b) Niacin
 - c) Riboflavin
 - ☒ d) Thiamin
- 55) What is the function of bile?
- ☒ a) It emulsifies fats.
 - b) It initiates digestion of protein.
 - c) It enhances absorption of complex carbohydrates.
 - d) It protects stomach and small intestine from hydrochloric acid.
- 56) About how many glasses of water should older adults drink every day?
- a) 2 to 4
 - b) 4 to 6
 - ☒ c) 6 to 8
 - d) 8 to 10

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57) Heavy use of soy products as a substitute for meat can inhibit absorption of

- a) Calcium
- b) Folate
- ☒ c) Iron
- d) Vitamin D

58) What is the approximate length of the typical adolescent growth spurt?

- a) 6 months
- b) 1 year
- ☒ c) 2.5 years
- d) 4.5 years

59) The word *organic* on a food label is no guarantee that the food is

- ☒ a) Produced without pesticide application
- b) Produced with manure or vegetable compost
- c) Produced without hormones or antibiotics
- d) Produced without genetic modification

60) When somebody's food intake exceeds the RDA for his size, activity level, and lifestyle. In order to obtain the best possible nutrition, what should he/she do?

- ☒ a) Increase exercise and decrease caloric intake
- b) Increase protein intake and decrease carbohydrate intake
- c) Decrease fat intake and increase protein intake
- d) Not be too concerned unless he gains additional weight

61) Which of the following foods may be used freely on any low sodium diet?

- ☒ a) Orange
- b) Spinach
- c) Milk
- d) Meat

62) Helpful seasoning to use in a sodium restricted diet include

- a) Soy sauce
- ☒ b) Lemon juice
- c) Herbs of spices
- d) Seasoned salt

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63) Which vitamin act as a antioxidant

- a) Vitamin B 2
- b) Vitamins B12
- ☒ c) Vitamin E
- d) None of the above

64) A state of negative nitrogen balance occurs during periods of

- a) Infancy
- b) Adolescent
- c) Pregnancy
- ☒ d) Surgery

65) A Slice of Bread Contain 2 gm of Protein and 15 mgm CHO in the form of Starch what is its Kilo calorie value

- a) 17 K cals
- b) 42 K cals
- ☒ c) 68 Kcals
- d) 92 K cals

66) In the following family of four, who has the highest energy need per unit of bodyweight

- ☒ a) 2 months old son
- b) 32 yrs old mother
- c) 35 yrs old father
- d) 70 years old grandfather

67) Nutritional programme which involve welfare of women and child is

- a) Midday meal programme
- b) CARE
- c) IDD programme
- ☒ d) ICDS

68) How much amount of fibre is recommended by NIN for Diabetic mellitus.

- a) 10 to 20 gms.
- b) 20 to 30 gms.
- ☒ c) 30 to 40 gms.
- d) 50 to 60 gms.

69) Fiber rich foods are helpful to prevent carcinoma of

- a) Breast .
- b) Liver .
- ☒ c) Colon .
- d) Thyroid.

BCA

- 70) Which one of the following oil contains highest percentage of poly-unsaturated fat
- ☒ a) Safflower oil
 - b) Sunflower oil.
 - c) Corn oil
 - d) Cottonseed oil
- 71) Pellagra is caused by the deficiency of which vitamin
- a) Ascorbic acid
 - b) Thiamine
 - ☒ c) Niacin
 - d) Piridoxine
- 72) Which of the following minerals has not yet been proven to be essential to human biochemical systems?
- ☒ a) Arsenic
 - b) Selenium
 - c) Molybdenum
 - d) Fluorine
- 73) Zinc deficiency results in:
- a) Enlarged genitalia
 - b) Acne
 - ☒ c) Stunted growth
 - d) Atherosclerosis
- 74) Tryptophan is sometimes used to promote sleep. This is probable, because it is a precursor of:
- a) Serotonin
 - ☒ b) Melatonin
 - c) Tryptazol
 - d) Tryptase
- 75) Which amino acid is used as a diagnostic test to distinguish between pernicious and megaloblastic anaemia?
- a) Tyrosine
 - b) Phenylalanine
 - ☒ c) Histidine
 - d) Tryptophan

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76) In which of the following situations is it preferable to use parenteral nutrition rather than enteral nutrition?

- a) Severe burns
- b) Cerebrovascular accident
- c) Septic shock
- ☒ d) Short-bowel syndrome

77) The main energy source for the brain and red blood cells is

- ☒ a) Glucose
- b) Glycogen
- c) Sucrose
- d) Fructose

78) An example of monosaccharide is

- a) Lactose
- ☒ b) Fructose
- c) Sucrose
- d) Maltose

79) In the absence of adequate glucose in the blood, the by-products of incomplete fat metabolism are

- a) Stress hormones
- b) Triglycerides
- c) Fatty acids
- ☒ d) Ketones

80) The latest Dietary Reference Intakes (DRIs) for carbohydrates recommended for adults is _____ grams.

- ☒ a) 130
- b) 180
- c) 220
- d) 300

81) The Acceptable Macronutrient Distribution Range (AMDR) for carbohydrates is _____ percent

- a) 10-25
- ☒ b) 45-65
- c) 25-45
- d) over 65

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82) People with phenylketonuria (PKU) need to control their intake of

- a) Fat
- b) Carbohydrate
- ☒ c) Protein
- d) Fiber

83) Which transport carrier enables fat and cholesterol to travel through the blood?

- a) Bile
- b) Lymph
- ☒ c) Lipoprotein
- d) Micelle

84) A rich source of omega-3 fatty acid is

- a) Cod-liver oil
- b) Olive oil
- ☒ c) Salmon oil
- d) Canola oil

85) Dietary cholesterol is found in

- ☒ a) Cheese and yogurt
- b) Oil and sugar
- c) Beans and nuts
- d) Fruits and vegetables

86) Consuming extra omega-3 fatty acids is not recommended because they may

- ☒ a) Interferes blood clotting
- b) Leaves an after taste
- c) Raise ldl-cholesterol
- d) Lower HDL-cholesterol

87) Which one of the following limits the health benefits of eating fish ?

- ☒ a) Mercury
- b) Arsenic
- c) Protein
- d) Cholesterol

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88) Flavonoids are chemicals found in

- ☒ a) Fruits and vegetables
- b) Milk and yogurt
- c) Meat and beans
- d) Oil and sugar

89) How much at an average Kcal/person should be catered for planning food aid during disaster:

- a) 1850
- ☒ b) 2100
- c) 2400
- d) 2800

90) How many males/day can be fed with One metric tonne grains in a disaster situation

- a) 1000
- b) 1500
- ☒ c) 1850
- d) 2100

91) In a disaster situation the aims of therapeutic feeding includes all except

- a) Medical treatment of severely malnourished
- b) Nutritional treatment of severely malnourished
- c) Reduce infant/child deaths
- ☒ d) Treat cases of infections

92) Community feeding of children is undertaken in all except

- a) ICDS programme
- b) Mid day meal programme
- c) Balwadi programme
- ☒ d) School health programme

93) Recommended intake of fiber should be

- a) 15 – 25 g/day
- ☒ b) 25 – 35 g/day
- c) 35 – 45 g/day
- d) 20 – 35 g/day

94) A whole grain is a food to increase that contains

- a) Bran, ectosperm, germ
- ☒ b) Bran, endosperm, germ
- c) Bran, endosperm, virus
- d) All bran, ectosperm, germ

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- 95) Foods such as potato chips, tortilla chips, snack crackers use a fat based replacer called
- ☒ a) Olestra
 - b) Aspartame
 - c) E-Z Trim
 - d) Z- E Trim
- 96) You eat 2400 calories / day and what % is from protein when you take in 60 g of protein?
- a) 5%
 - ☒ b) 10%
 - c) 15%
 - d) 20%
- 97) Breaking down of larger substances into smaller units is called
- a) Anabolism
 - b) Botulism
 - ☒ c) Catabolism
 - d) Metabolism
- 98) Which of the following are nutritionally dispensable amino acids in healthy human?
- a) Citrulline and N-acetyl glutamine;
 - b) Leucine and isoleucine
 - ☒ c) Aspartate and alanine
 - d) Methionine and lysine
- 99) Which of the following amino acids has the highest nitrogen content per mole?
- ☒ a) Arginine
 - b) Asparagine
 - c) Glutamine
 - d) Ornithine
- 100) Which is the most accurate parameter to estimate muscle protein catabolism ?
- a) Rate of total urea nitrogen excretion
 - ☒ b) Rate of total 3 methyl-histidine excretion
 - c) Rate of plasma creatinine concentration
 - d) Nitrogen balance concentration per day