

# IBPS SO Exam 2013 Agricultural Officer Professional Knowledge Paper

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1. A phenomenon wherein a single gene has more than one phenotypic effect is known as

- (A) Pleiotropism
- (B) Epistasis
- (C) Hypostasis
- (D) Duplicate genes
- (E) None of these

2. Which one of the following is a rich source of protein ?

- (A) Scytonema
- (B) Spirulina
- (C) Spirogyra
- (D) Stigonema
- (E) None of these

3. Glycolysis is also known as

- (A) Gluconeogenesis
- (B) EMP Pathway
- (C) Hexose monophosphate shunt
- (D) Photorespiration
- (E) None of these

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4. Rate of photosynthesis is higher in light.

- (A) White
- (B) Red
- (C) Green
- (D) Blue
- (E) None of these

5. The fruit ripening hormone is

- (A) Abscisic acid
- (B) Cytokinin
- (C) Ethylene

- (D) Gibberellin
- (E) None of these

6. The largest herbarium in India located at

- (A) New Delhi
- (B) Dehradun
- (C) Kolkata
- (D) Pune
- (E) None of these

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7. International Rice Research Institute is in

- (A) Hyderabad
- (B) Cuttack
- (C) Kenya
- (D) Manila
- (E) None of these

8. Obligate anaerobic bacteria can

- (A) grow without oxygen and produce high energy
- (B) grow without oxygen and produce low energy
- (C) have a fermentative metabolism and a respiratory chain
- (D) grow with or without oxygen and produce medium energy
- (E) None of these

9. Which one of the following is the correct food chain ?

- (A) Algae - insects - frog - peacock - snake
- (B) Algae - frog - insects - snake - peacock
- (C) Algae - frog - insects - peacock - snake
- (D) Algae - insects - frog - snake - peacock
- (E) None of these

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10. DNA and RNA are similar to each other because both

- (A) have similar sugars
- (B) are nucleotide polymers
- (C) have similar pyrimidines
- (D) are double stranded
- (E) None of these

11. A simple technique has been developed in India by using the following organisms as biofertilizers.

- (A) Azotobacter and Rhizobium

- (B) Azolla and Azotobacter
- (C) Azolla and Rhizobium
- (D) Azotobacter and Nostoc
- (E) None of these

12. A sclerotium refers to a modified mycelium which is

- (A) an underground structure
- (B) a food storing organ
- (C) a conidial type
- (D) a hard **resting** body
- (E) None of these

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13. In paddy, the type of inflorescence is said to be

- (A) Raceme
- (B) Panicle
- (C) Thyrsus
- (D) Cyathium
- (E) None of these

14. Botanical name of Pearl millet (Bajra) is

- (A) Avena sativa
- (B) Zea mays
- (C) Eleusine coracana
- (D) Pennisetum typhoides
- (E) None of these

15. Which is the matching set in classification ?

- (A) Neries, planaria, roundworm, earthworm
- (B) Millipede, crab, centipede, cockroach
- (C) Starfish, jellyfish, cuttlefish, octopus
- (D) Sea-urchin, lobster, leech, locust
- (E) None of these

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16. The insects excrete in the form of uric acid because

- (A) most of them are terrestrial
- (B) the circulatory system is open
- (C) the blood is colourless
- (D) most of them are aquatic
- (E) None of these

17. Measurement of the rate of oxygen consumption in unit volume of water over a period of time is carried out to determine

- (A) Fermentation
- (B) Biogas generation

- (C) Biosynthetic pathway
- (D) Biological oxygen demand
- (E) None of these

18. Biosphere is made up of

- (A) organism
- (B) organism and lithosphere
- (C) organism, lithosphere and atmosphere
- (D) organism, lithosphere, atmosphere and hydrosphere
- (E) None of these

19. Sudden mass death of fishes from oxygen depletion is more likely in the

- (A) Eutrophic lakes
- (B) Oxalotrophic lakes
- (C) Oligotrophic lakes
- (D) Mesotrophic lakes
- (E) None of these

20. The sanctuary having maximum number of rare animals is

- (A) Kaziranga National Park
- (B) Corbett National Park
- (C) Manas National Park
- (D) Dudhwa National Park
- (E) None of these

21. The famous 'Chipko Movement' is associated with

- (A) S.L. Bahuguna
- (B) Indira Gandhi
- (C) Jawaharlal Nehru
- (D) H.N. Bahuguna
- (E) None of these

22. Red data book is famous for

- (A) Extinct animals
- (B) Endangered animals and plants
- (C) Endangered animals
- (D) Important wildlife
- (E) None of these

23. Bottom layer of deep fresh water habitat is

- (A) Hypolimnion
- (B) Epilimnion
- (C) Thermocline
- (D) Metalimnion
- (E) None of these

24. International Convention on Biological Diversity was ratified in the year

- (A) 1971 (B) 1994 (C) 1973 (D) 1990
- (E) None of these

25. Which is considered as biological paradise in India ?

- (A) Gulf of Mannar
- (B) Nilgiri Bioreserve
- (C) Sundarbans
- (D) Nanda Devi
- (E) None of these

26. National Bureau of Fish Genetic Resources (NBFGR) is located in

- (A) Chennai (B) New Delhi (C) Lucknow (D) Bangalore (E) None of these

27. Which of these is often called as 'cell organiser' ?

- (A) Nucleus (B) Centriole (C) Nucleolus (D) Ribosome (E) None of these

28. The power house of the cell is

- (A) Nucleus
- (B) Ribosome
- (C) Mitochondria
- (D) Lysosome
- (E) None of these

29. Hardness of woody tissue is due to

- (A) Silica (B) Lignin (C) Cellulose (D) Suberin (E) None of these

30. Pea seeds will germinate best if soaked in a jar containing

- (A)  $H_2$
- (B)  $O_2$
- (C)  $N_2$
- (D)  $CO_2$
- (E) None of these

31. The shape of the growth curve is **usually**

- (A) Inverted bell
- (B) Linear
- (C) Sigmoid
- (D) Zig-Zag
- (E) None of these

32. The forces that can change the frequency of an allele in a population are

- (A) forward mutation, gene conversion, neutral evolution and recombination
- (B) selection, mutagenesis, migration, inbreeding and random genetic drift
- (C) dominance, family selection, fitness and diversification
- (D) gene interaction, gene transfer, gene mutation and outbreeding
- (E) None of these

32. The anticodon region is present in

- (A) r-RNA
- (B) hn-RNA
- (C) m-RNA
- (D) t-RNA
- (E) None of these

33. In reptiles and birds, nitrogen is excreted in the form of

- (A) Urea
- (B) Uric acid
- (C) Ammonia
- (D) Lipids
- (E) None of these

34. Which of the following techniques are used in assaying monoclonal antibodies ?

- (A) Flow cytometry
- (B) PAGE
- (C) HPLC
- (D) Scintillation counter
- (E) None of these

35. Which of the following synthetic polypeptides will form a triple **helix** !'

- (A) (Pro-Gly)<sub>n</sub>
- (B) (Phe-Gly-Gly)<sub>n</sub>
- (C) (Pro-Gly-Gly)<sub>n</sub>

- (D) (Gly-Pro-Pro-Gly)<sub>n</sub>
- (E) None of these

36. World Health Organisation (WHO) announced the eradication of small pox as a disease in the year

- (A) 1988
- (B) 1986
- (C) 1977
- (D) 1979
- (E) None of these

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38. A disease that attacks many in a community simultaneously is

- (A) an epidemic
- (B) a noscomial infection
- (C) a secondary infection
- (D) a bacteremia
- (E) None of these

39. The term "Microbiology" was coined by

- (A) Antonie van Leeuwenhoek
- (B) Robert Koch
- (C) Louis Pasteur
- (D) Julius Richard Petri
- (E) None of these

40. Tumour causing viruses are known as

- (A) Oncogenic viruses
- (B) Para viruses
- (C) Tungro viruses
- (D) Variola viruses
- (E) None of these

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41. Red orange colour in saffron is due to

- (A) Xanthophyll
- (B) Chlorophyll
- (C) Crocetin
- (D) Polyphenols
- (E) None of these

42. Choose the correct answer. Beaten rice is also known as

- (A) Flaked rice

- (B) Polished rice
- (C) Puffed rice
- (D) Popped rice
- (E) None of these

43. Spice bag is usually used in the processing of

- (A) Sauce
- (B) Jam
- (C) Pickle
- (D) Nectar
- (E) None of these

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44. Cereals are

- (A) deficient in lysine and rich in methionine
- (B) rich in lysine and deficient in methionine
- (C) rich in lysine and methionine
- (D) deficient in lysine and methionine
- (E) None of these

45. Roasting coffee beans improves the content of

- (A) Pantothenic acid
- (B) Niacin
- (C) Riboflavin
- (D) Thiamine
- (E) None of these

46. Annual loss of agricultural produce in India is more due to different factors. Find out the factors in correct sequence based on the higher degree of loss to lower degree.

- (A) Weeds followed by insects followed by diseases
- (B) Insects followed by diseases followed by weeds
- (C) Diseases followed by weeds followed by insects
- (D) Weeds followed by diseases followed by insects
- (E) None of these

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47. The crop grown for grain, green manure and fodder

- (A) Until
- (B) Chick pea
- (C) Red gram
- (D) Cow pea
- (E) None of these

48. Seed of rice is called

- (A) Drupe
- (B) Berry
- (C) Caryopsis
- (D) Pod
- (E) None of these



49. Machine used for dehusking of pulses is

- (A) energy roll dehusker
- (B) rubber roll dehusker
- (C) centrifugal dehusker
- (D) under-runner disc sheller
- (E) None of these

50. The size of a tractor Tyre may be represented as

- (A) section height x rim width
- (B) section height x rim diameter
- (C) section thickness x rim diameter
- (D) section radius x rim width
- (E) None of these