## Sample Test Paper for Pharm-D (Morning \& Evening)

## I nstructions

## Total number of Sections $=05$ <br> Total number of Questions = 42

The Sample Paper is totally MCQ Based, consisting of Question statements and four/ five (i.e. A-D/ E) Answer choices. You have to select the correct answer choice.

Instructions about Answer Sheet + Right Answer Keys are at the end of Exercise.

Note: This sample paper does not include quantitatively the same number of questions as there would be in actual paper. This is merely meant to provide conceptual guidance to the users or prospective candidates.

## ENGLISH

This section assesses the skills of English Language. Main stress of this section is on the grammar, vocabulary and reading comprehension.
Choose the lettered word or phrase that is most nearly opposite in meaning to the word in capital letters.

1. MI RACLE:
A. usualness
B. wonder
C. marvel
D. sensation
2. MONOTHEIST:
A. psychologist
B. analyst
C. polytheist
D. physicist

Complete the sentences by choosing the most appropriate word, from the given lettered choices ( $A$ to $D$ ) below each.
3. Crystal vase breaks easily, $\qquad$ handle it with care.
A. so that
B. so much
C. so
D. so well
4. The police do not understand how the thieves $\qquad$ the house.
A. got in
B. got into
C. get into
D. get in

Identify the word or phrase that needs to be changed for the sentence to be correct:
5. Ali finds it difficult to put his idea into words. No error
A B
C
D
E
6. Owing for the flooded condition of roads, most of the people were unable to get to the offices. No error

$$
\bar{D} \quad E
$$

Choose the word most similar in meaning to the capitalized one.
7. ASTONISH:
A. tranquil
B. serene
C. peaceful
D. startled
E. calm
8. BEHOLD:
A. see
B. touch
C. hear
D. smell

## Read the passage to answer questions 9-10

Young people must be educated in modern science - its methods and its mental attitudes. Without this education they will find the modern world utterly incomprehensible. But they cannot be good citizens of the world, or of their own national state, unless they are intellectually and imaginatively aware of the values which underlie human beliefs, motives and conduct. In this troubled period of human history, religion and the humanities are as vital as science to the education of good members of a good society.
9. "I ncomprehensible" can best be replaced by
A. understandable
B. explicable
C. reasonable
D. beyond their understanding
10."Troubled period of human history" refers to
A. primitive times
B. modern times
C. good times
D. bad times

## SUBJ ECT

This section assesses the basic skills of Professional Qualification(s) of the candidate.

## CHEMI STRY <br> PHYSICS <br> BIOLOGY

## CHEMI STRY

11.Dehydration of ethanol in the presence of $\mathbf{H}_{\mathbf{2}} \mathbf{S O}_{\mathbf{4}}$ (at high temperature), results in the formation of
A. Ethane
B. Diethyl ether
C. Ethene
D. Butane
12."Aqua Regia" is used as solvent for gold and silver. It is mixture of $\mathrm{HNO}_{3}$ and HCl , their ratio is
A. 3:1
B. $1: 3$
C. $2: 2$
D. $5: 1$
13.The hybridization between $\mathrm{C}-\mathrm{C}$ atoms in $\mathrm{C}_{2} \mathrm{H}_{2}$ (ethyne) is
A. $\mathbf{s p} \square-\mathbf{s p} \square$
B. $\mathrm{sp} \square$-sp
C. $\mathrm{sp}-\mathrm{sp}$
D. $\mathbf{s p} \square-\mathbf{s p} \square$
E. $\mathbf{s p} \square$-s
14."Tollen's Test" is used for the identification of aldehydes, and is characterized by
A. Appearance of blue colour
B. Appearance of the mirror
C. Formation of red ppt
D. Appearance of unpleasant smell
$15 . \mathrm{HCOOH} \xrightarrow{\mathrm{H}_{2} \mathrm{SO}_{4}} \mathrm{H}_{2} \mathrm{O}+\mathrm{CO}$
In this reaction $\mathbf{H}_{2} \mathbf{S O}_{\mathbf{4}}$ is used as
A. Dehydrating agent
B. An acid
C. Catalyst
D. Sulphonating agent
16. $\mathrm{CH}_{3}-\stackrel{\mathrm{CH}_{3}}{\mathrm{CH}}-\mathrm{CH}_{3}$ is iso butane, its I UPAC name will be
A. 2, methyl propane
B. 1, methyl propane
C. 2, butane
D. 3, methyl propane
$\mathbf{N H}_{\mathbf{2}}$
17. $\mathrm{COOH}-\mathrm{CH}^{\mathrm{l}}-\mathrm{CH}_{2}$ - COOH is Aspartic acid, what is the common name?
A. Basic amino acid
B. Neutral amino acid
C. Acidic amino acid
D. Essential amino acids
18.When benzene is nitrated, concentrated nitric acid and sulphuric acids react to form an intermediate which attacks the benzene ring. Which one of the following represents this intermediate?
A. $\mathrm{NO}^{+}$
B. $\quad \mathbf{N O}_{2}$
C. $\quad \mathrm{NO}_{2}^{-}$
D. $\mathbf{N O}_{2}^{+}$
E. $\mathrm{NO}_{3}^{-}$
19.Which of the following particles would, on losing an electron, have a half-filled set of $p$ orbital?
A. C
B. $\quad \mathbf{N}$
C. $\mathbf{N}^{-}$
D. $\mathbf{O}^{+}$
E. $\mathbf{O}^{-}$
20. $\alpha$-rays (Alpha) are
A. fast moving electrons
B. protons
C. neutron
D. positively charged helium nuclei

## PHYSI CS

21.A 60 watt bulb is operated by 240 volts. What is the current through the bulb?
A. $\quad 2.5 \mathrm{~A}$
B. $\quad 0.25 \mathrm{~A}$
C. 0.0125 A
D. $\quad 25 \mathrm{~A}$
22.The rate of change of momentum of a body falling freely under gravity is equal to its
A. impulse
B. kinetic energy
C. power
D. weight
23.Car $X$ is traveling at half the speed of car $Y$. Car $X$ has twice the mass of car $Y$. Which statement is correct?
A. Car $X$ has half the kinetic energy of car $Y$
B. Car $X$ has one quarter of the kinetic energy of car $Y$
C. Car $X$ has twice the Kinetic energy of car $Y$
D. The two cars have the same kinetic energy
24.Satellites are in circular orbit around the Earth. What is the relationship between the radii $r$ of their orbits and their speeds $v$ ?
A. $v^{\alpha} r^{2}$
B. $v^{\alpha} r$
C. $v^{2} \alpha \frac{1}{r}$
D. $\quad \mathrm{v} \alpha \frac{\mathbf{1}}{\mathrm{r}^{2}}$
25. An object travels at constant speed around a circle of radius 1.0 m in 1.0 $s$. What is the magnitude of its acceleration?
A. Zero
B. $\quad 1.0 \mathrm{~m} \mathrm{~s}^{-2}$
C. $\quad 2 \pi \mathrm{~m} \mathrm{~s}^{-2}$
D. $4 \pi^{2} \mathrm{~m}^{-2}$
26. An electron is moving along the axis of a solenoid carrying a current. Which of the following is a correct statement about the electromagnetic force acting on the electron?
A. The force acts radially inwards.
B. The force acts radially outwards.
C. The force acts in the direction of motion.
D. No force acts.
27.An object of mass of 2 kg rotates at constant speed in a horizontal circle of radius 5 m . The time for one complete revolution is 3 s . What is the magnitude of the resultant force acting on the object?
A. $\frac{4 \pi^{2}}{9} N$
B. $\frac{40 \pi^{2}}{9} N$
C. $\frac{100 \pi^{2}}{9} N$
D. $\frac{400 \pi^{2}}{9} N$
28. A particle performs simple harmonic motion of amplitude 0.020 m and frequency 2.5 Hz. What is its maximum speed?
A. $\quad 0.008 \mathrm{~ms}^{-1}$
B. $\quad 0.050 \mathrm{~ms}^{-1}$
C. $\quad 0.125 \mathrm{~ms}^{-1}$
D. $0.157 \mathrm{~ms}^{-1}$
E. $\quad 0.314 \mathrm{~ms}^{-1}$
29. Which of the following correctly relates the units for magnetic flux and magnetic flux density?
A. $1 \mathrm{~Wb}=1 \mathrm{Tm}^{-3}$
B. $1 \mathrm{~Wb}=1 \mathrm{Tm}^{-2}$
C. $1 \mathbf{W b}=1 \mathrm{Tm}^{2}$
D. $1 \mathrm{~Wb}=1 \mathrm{Tm}^{3}$
30.A generator produces 100 kW of power at a potential difference of 10 kV . The power is transmitted through cables of total resistance $5 \Omega$. How much power is dissipated in the cables?
A. 50 W
B. 250 W
C. 500 W
D. 1000 W
E. 50000 W

## BIOLOGY

31.If one ribose molecule were bonded to one adenine molecule and one phosphate molecule, we would have a
A. Ribosome
B. Nucleotide
C. Nucleic acid
D. ATP
E. ADP
32.What is the correct sequence of events in the development of the embryo?
A. morula $\rightarrow$ cleavage $\rightarrow$ blastula $\rightarrow$ gastrula
B. cleavage $\rightarrow$ morula $\rightarrow$ blastula $\rightarrow$ gastrula
C. cleavage $\rightarrow$ gastrula $\rightarrow$ blastula $\rightarrow$ morula
D. blastula $\rightarrow$ cleavage $\rightarrow$ gastrula $\rightarrow$ morula
E. morula $\rightarrow$ blastula $\rightarrow$ cleavage $\rightarrow$ gastrula
33.In which form is carbon dioxide mainly transported in blood?
A. As carbamino-haemoglobin
B. As carbonic acid
C. As hydrogencarbonate
D. In solution
34.The mouse is known as Mus musculus. The Mus is the
A. Phylum
B. Class
C. Order
D. Genus
E. Species
35.Albinos have a genotype of aa, while all other members of population are either AA or Aa. The offspring of a cross between a heterozygous male and albino female would be
A. $100 \%$ albino
B. $\mathbf{1 0 0 \%}$ normal
C. 50\% normal,50\% albino
D. 25\% normal,75\% albino
E. 75\% normal,25\% albino
36.Molds and yeast are classified as
A. Rhodophytes
B. Bryophytes
C. Fungi
D. Ciliates
E. Flagellates

NTS
37.Which compound captures light energy in plants?
A. $\quad \mathrm{O}_{2}$
B. $\quad \mathbf{C O}_{2}$
C. $\mathrm{H}_{2} \mathrm{O}$
D. Chlorophyll
E. None of the above
38.The Calvin-Benson cycle
A. Does not use light directly
B. Occurs in the cytoplasm
C. Releases $\mathrm{CO}_{2}$
D. Produces ATP
E. None of the above
39.Which of the following is not a characteristic of the kingdom Protista?
A. Members can be photosynthetic.
B. Members can be free living.
C. Some members move via flagella.
D. Some members are shaped like rods and termed bacilli.
E. Some members spend part of their life cycle inside insects.
40.Which of the following terms describes the process by which the plasma membrane moves substances inward, against a concentration gradient?
A. Facilitated diffusion
B. Active transport
C. Osmosis
D. Simple diffusion
E. Autotrophism

## GENERAL KNOWLEDGE

41.Karachi is known as:
A. Broadway of Pakistan
B. City of Lights
C. Gateway of Pakistan
D. Heart of Pakistan
42.C.N.N. stands for:
A. Cable Network of News
B. Cable News Network
C. Cyber News Network
D. Central News Network

## HOW TO Fl LL THE ANSWER SHEET?

One page printed Answer Sheet is provided to answer the questions. USE ONLY BALL PEN (BLACK/ BLUE) TO SHADE/ FILL THE CIRCLES.

How to fill an Answer: Answer sheet contains five circles containing five options of answer for one questions, containing alphabets from $A$ to $E$ inside, against each question number. The candidate has to completely shade/ fill one circle that $s /$ he thinks is correct. For example the candidate feels that the correct answer of the given question is ' $A$ ', then $s /$ he may shade/ fill the circle containing alphabet ' $A$ ' with ball pen like this:

## "A" Filled



Incorrect Filling:

(A) B (D) (E)


## Personal Data on Answer Sheet

The Answer Sheet contains personal data of candidate on the top of the sheet. It has candidates'. NAME, FATHER NAME and ROLL NO. The candidate is required to critically check these fields and sign in the required space. If any field of personal information is found in-correct the candidate MUST inform the invigilator present around.

Write down your Question booklet No. given on the right top corner of the Question booklet in the column of "Question book No".

Fill the circle "color of your question book". Fill the right circle otherwise you will confuse the marking process which can have negative effects.

Building Standards in Educational and Professional Testing

## Answer Key Sample Paper Pharm-D

| Q \#. | Right Choice |
| :---: | :---: |
| 1 | A |
| 2 | C |
| 3 | C |
| 4 | B |
| 5 | E |
| 6 | A |
| 7 | D |
| 8 | A |
| 9 | D |
| 10 | B |
| 11 | C |
| 12 | B |
| 13 | C |
| 14 | B |
| 15 | A |
| 16 | A |
| 17 | C |
| 18 | D |
| 19 | C |
| 20 | D |
| 21 | B |
| 22 | D |
| 23 | A |
| 24 | C |
| 25 | D |
| 26 | D |
| 27 | B |
| 28 | E |
| 29 | C |
| 30 | C |
| 31 | B |
| 32 | B |
| 33 | C |
| 34 | D |
| 35 | C |
| 36 | C |
| 37 | D |
| 38 | A |
| 39 | D |
| 40 | B |
| 41 | B |
| 42 | B |

