

FINAL ANSWER KEY

Question Paper Code:	30/2016/OL
Category Code:	569/2014
Exam:	Planning and Development Officer
Medium of Question:	English
Date of Test	09-03-2016
Alphacode	A

Question1:-Who among the following was not a member of the Constituent Assembly of India?

A:-Pattom Thanupillai

B:-R. Shankar

C:-P.T. Chacko

D:-Sir C. Sankaran Nair

Correct Answer:- Option-D

Question2:-In which postal zone is Kerala included?

A:-5

B:-6

C:-2

D:-4

Correct Answer:- Option-B

Question3:-Dakshinayanam is a book written by

A:-V.T. Bhattathirippad

B:-M.R. Bhattathirippad

C:-E.M.S. Namboodiripad

D:-None of these

Correct Answer:- Option-A

Question4:-The introduction of the first five year plan in India was prepared by

A:-Jawaharlal Nehru

B:-P.C. Mahalanobis

C:-Dr. K.N. Raj

D:-Gulsarilal Nanda

Correct Answer:- Option-C

Question5:-Which schedule of the Constitution of India provides the list of 22 regional languages?

A:-7

B:-9

C:-8

D:-4

Correct Answer:- Option-C

Question6:-Who was the founder of Ananda Maha Sabha?

A:-Chattampi Swamikal

B:-Swami Anandatheerthan

C:-Brahmananda Sivayogi

D:-Swami Agamananda

Correct Answer:- Option-C

Question7:-The drama Vishavriksham was written by

A:-N.N. Pillai

B:-Thoppil Bhasi

C:-C.J. Thomas

D:-K.T. Muhammed

Correct Answer:- Option-C

Question8:-Who described Nalacharitam Aattakkatha as Kerala Sakunthalam?

A:-Joseph Mundasseri

B:-Kuttikrishna Marar

C:-C.P. Achutha Menon

D:-P. Govinda Pillai

Correct Answer:- Option-A

Question9:-The constitutional amendment for the Right of children to free and compulsory education was made in

A:-2000

B:-2002

C:-2004

D:-2006

Correct Answer:- Option-B

Question10:-How many islands are there in the group of Lakshadweep?

A:-32

B:-36

C:-38

D:-35

Correct Answer:- Option-B

Question11:-Who inaugurated Paliyam Satyagraha?

A:-A.K. Gopalan

B:-C. Kesavan

C:-P. Krishna Pillai

D:-K. Kelappan

Correct Answer:- Option-B

Question12:-Headquarters of the Kerala Gramin Bank

A:-Kochi

B:-Thiruvananthapuram

C:-Malappuram

D:-Thrissur

Correct Answer:- Option-C

Question13:-The instrument used in the artform Patayani

A:-Thappu

B:-Udukku

C:-Thudi

D:-Kokkara

Correct Answer:- Option-A

Question14:-Who founded Pratyaksha Raksha Daiva Sabha?

A:-Chavara Achan

B:-Poikayil Yohannan

C:-K.P. Karuppan

D:-Brahmananda Sivayogi

Correct Answer:- Option-B

Question15:-Which article of the Constitution of India deals with Grama Sabha?

A:-242

B:-243 A

C:-244 A

D:-240

Correct Answer:- Option-B

Question16:-Who described M.C. Joseph as the "Pope of the Rationalists"?

A:-Kuttippuzha Krishna Pillai

B:-M.P. Paul

C:-K.T. Kovoov

D:-P. Kesava Dev

Correct Answer:- Option-A

Question17:-Founder of Kerala Kaumudi

A:-C.V. Kunhiraman

B:-K. Sukumaran

C:-Kumaranasan

D:-Sahodaran Ayyappan

Correct Answer:- Option-A

Question18:-The newspaper "Prabhatam" was started by

A:-Kesari

B:-E.M.S. Namboodiripad

C:-P. Ramakrishna Pillai

D:-Sahodaran Ayyappan

Correct Answer:- Option-B

Question19:-The salary of the President of India is taken from

- A:-consolidated fund
- B:-contingency fund
- C:-emergency fund
- D:-none of these

Correct Answer:- Option-A

Question20:-Which article of the Indian Constitution deals with Right to Equality?

- A:-Article 15
- B:-Article 14
- C:-Article 16
- D:-Article 12

Correct Answer:- Option-B

Question21:-Morse test is conducted to find

- A:-Brake power of a single cylinder engine
- B:-Indicated power of a single cylinder engine
- C:-Indicated power of a multi-cylinder engine
- D:-Frictional power of a single cylinder engine

Correct Answer:- Option-C

Question22:-Relationship between shear stress, velocity gradient and dynamic viscosity of a fluid is

- A:-Velocity gradient = shear stress * dynamic viscosity
- B:-Dynamic viscosity = shear stress * velocity gradient
- C:-Velocity gradient = shear stress / dynamic viscosity
- D:-Shear stress = velocity gradient * dynamic viscosity

Correct Answer:- Option-D

Question23:-For stability of the floating body meta-centric height must be

- A:-Below the centre of gravity
- B:-Above the centre of gravity
- C:-Meta centre and centre of gravity must coincided
- D:-Must be in same horizontal plane

Correct Answer:- Option-B

Question24:-Compression ratio is of a reciprocating compressor id defined as

- A:-volume after compression to volume before compression
- B:-Pressure before compression to pressure after compression
- C:-pressure after compression to pressure before compression
- D:-Volume before compression to volume after compression

Correct Answer:- Option-D

Question25:-In a hole basis system of fit

- A:-The fundamental deviation of hole is not zero
- B:-The fundamental deviation of shaft is zero
- C:-The fundamental deviation of hole is zero
- D:-None of the above

Correct Answer:- Option-C

Question26:-Bernoulli's equation represents the

- A:-Forces at any point in the field and obtained by integrating the momentum equation for viscous flows
- B:-Energies in any point in the flow field and is obtained by integrating the Euler equation
- C:-Momentum at any point in the flow field and is obtained by integrating continuity equation
- D:-Moment of momentum and is obtained by integrating the energy equation

Correct Answer:- Option-B

Question27:-Property of the material which enable is to absorb energy without fracture is known as

- A:-Hardness
- B:-Toughness
- C:-Brittleness
- D:-All the above

Correct Answer:- Option-B

Question28:-Which of the following tool material retain their hot hardness at highest temperature?

- A:-Carbide
- B:-Cermets
- C:-Ceramic
- D:-Borazon

Correct Answer:- Option-D

Question29:-Herringbone gears are used to

- A:-To counter balance the end thrust
- B:-To increase axial thrust
- C:-Connect two non-intersecting shafts
- D:-None of these

Correct Answer:- Option-A

Question30:-Provision of fins on a given heat transfer surface will be more if there are

- A:-Fewer number of thick fins
- B:-Fewer number of thin fins
- C:-Large number of thin fins
- D:-Large number of thick fins

Correct Answer:- Option-C

Question31:-A good refrigerant should have

- A:-High latent heat of vaporization and low freezing point
- B:-High operating pressure and freezing point
- C:-High specific volume and high latent heat of vaporization
- D:-Low COP and low freezing point

Correct Answer:- Option-A

Question32:-In value engineering the term value refers to

- A:-Relation between function and cost
- B:-Relation between cost and efficiency
- C:-Market Value
- D:-Relation between productivity and cost

Correct Answer:- Option-A

Question33:-Which of the following plans guarantee minimum wage to a works and bonus based on fixed percentage of time saved?

- A:-Gantt plan
- B:-Halsey plan
- C:-Powan plan
- D:-Bedaux plan

Correct Answer:- Option-C

Question34:-Addition of which of the following improves machining of copper?

- A:-Sulphur
- B:-Vanadium
- C:-Tin
- D:-Zinc

Correct Answer:- Option-A

Question35:-The curve traced by a point on the circumference of a circle which rolls along the inside of a fixed circle is known as

- A:-Epicycloids
- B:-Hypocycloid
- C:-Cardioids
- D:-Involutives

Correct Answer:- Option-B

Question36:-In gear hobbing

- A:-Only hob rotates
- B:-Only gear blank
- C:-Both hob and gear blank rotate
- D:-Neither hob nor gear blank rotates

Correct Answer:- Option-C

Question37:-The buckling load will be maximum for a column if

- A:-One end of the column is clamped and the other end is free
- B:-Both ends of the column are clamped
- C:-Both ends of the column are hinged
- D:-One end of the column is hinged and the other end is free

Correct Answer:- Option-B

Question38:-Reference fuels for knock rating of SI engine fuels would include

- A:-Iso-octane and alpha methyl naphthalene
- B:-Normal octane and aniline

C:-Iso-octane and n-hexane

D:-n-heptane and iso-octane

Correct Answer:- Option-D

Question39:-If speed of a centrifugal pump is doubled, then

A:-Power required to operate it is doubled

B:-The volumetric discharge is increased 4 times

C:-The head becomes 4 times as great

D:-Specific speed becomes 4 times

Correct Answer:- Option-C

Question40:-If the depth of a rectangular beam is halved the deflection for a beam carrying a mid point load shall be

A:-Halved

B:-Doubled

C:-Four times

D:-Eight times

Correct Answer:- Option-D

Question41:-If Poisson's ration for a material is 0.5, then the elastic modulus for material is

A:-Three times its shear modulus

B:-Four times its shear modulus

C:-Equal to its shear modulus

D:-Indeterminate

Correct Answer:- Option-A

Question42:-Production cost refers to prim cost plus

A:-Factory overheads

B:-Factory and administration overheads

C:-Factory, administration and sales overheads

D:-Factory, administration and sales overheads and profit

Correct Answer:- Option-A

Question43:-In a CNC program block, N002 G03 G91 X40 Z40....,G02 and G91 refer to

A:-Circular interpolation in counter clockwise direction and incremental dimension

B:-Circular interpolation in counter clockwise direction and absolute dimension

C:-Circular interpolation in clockwise direction and incremental dimension

D:-Circular interpolation in clockwise direction and absolute dimension

Correct Answer:- Option-A

Question44:-If the arrival takes place every 10 minutes with a service time of 4 minutes per unit then the mean arrival rate, mean service rate and the probability that one would have to wait will be respectively

A:-10, 4 and 0.25

B:-0.1, 0.25 and 0.4

C:-10, 0.4 and 0.25

D:-0.1, 0.25 and 0.1

Correct Answer:- Option-B

Question45:-It is required to cut screw threads of 2 mm pitch on a lathe. The lead screw has a pitch of 6 mm. If the spindle speed is 60 rpm, then the speed of the lead screw will be the material is rigid

A:-10 rpm

B:-120 rpm

C:-20 rpm

D:-180 rpm

Correct Answer:- Option-C

Question46:-For adiabatic expansion with friction through a nozzle, the following remains constant

A:-Stagnation enthalpy

B:-Entropy

C:-Static enthalpy

D:-Stagnation pressure

Correct Answer:- Option-A

Question47:-A furnace is made of a red brick wall of thickness 0.5 m and conductivity 0.7 W/mk. For the same heat loss and temperature drop, this can be replaced by a layer of diatomite earth of conductivity 0.14 W/mk and thickness

A:-0.05 m

B:-0.1 m

C:-0.2 m

D:-0.5 m

Correct Answer:- Option-B

Question48:-A heat exchanger with heat transfer surface area A and overall transfer coefficient U handles two fluids of heat capacitors C_{\max} and C_{\min} . The parameter NTU (number of transfer units) used in the analysis of heat exchanger is specified as

- A:- $(AC_{\min})/U$
- B:- $U/(AC_{\min})$
- C:- AUC_{\min}
- D:- $(AU)/(C_{\min})$

Correct Answer:- Option-D

Question49:-Effective temperature is that temperature of saturated air which gives the same degree of comfort as the air at given

- A:-DBT, WBT and incidental solar radiation
- B:-WBT, incidental solar radiation and air flow rate
- C:-DBT, solar temperature and air flow rate
- D:-DBT, WBT and air flow rate

Correct Answer:- Option-D

Question50:-In a saturated air-water vapour mixture, the

- A:-Dry bulb temperature is higher than the wet bulb temperature
- B:-Dew point temperature is lower than the wet bulb temperature
- C:-Dry bulb, wet bulb and dew point temperature are the same
- D:-Dry bulb temperature is higher than the dew point temperature

Correct Answer:- Option-C

Question51:-The value engineering technique in which experts of the same rank assemble for product development is called

- A:-Delphi
- B:-Brain storming
- C:-Morphological analysis
- D:-Direct expert comparison

Correct Answer:- Option-B

Question52:-A gas engine has a swept volume of 300 cc and clearance volume of 25 cc. Its volumetric efficiency is 0.88 and mechanical efficiency is 0.90. What is the volume of the mixture taken in, per stroke?

- A:-248 cc
- B:-252 cc
- C:-264 cc
- D:-286 cc

Correct Answer:- Option-C

Question53:-In time study, the rating factor is applied to determine

- A:-Standard time of a job
- B:-Merit rating of the worker
- C:-Fixation of incentive rate
- D:-Normal time of job

Correct Answer:- Option-B

Question54:-In Manufacturing management, the term "Dispatching" is used to describe

- A:-Dispatch of sales order
- B:-Dispatch of factory mail
- C:-Dispatch of finished product to the user
- D:-Dispatch of work orders through shop floor

Correct Answer:- Option-D

Question55:-A slender shaft supported on two bearings at its ends carries a disc with an eccentricity e from the axis of rotation. The critical speed of the shaft is N . If the disc is replaced by a second one of same weight but mounted with an eccentricity $2e$. Critical speed of the shaft in the second case is

- A:- $(N)/2$
- B:- $(N)/(\sqrt{2})$
- C:- N
- D:- $2N$

Correct Answer:- Option-B

Question56:-The gear train usually employed in clocks is a

- A:-reverted gear train
- B:-simple gear train
- C:-sun and planet gear
- D:-differential gear

Correct Answer:- Option-A

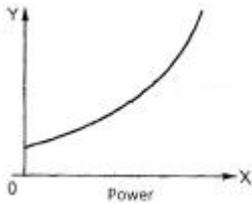
Question57:-Group technology brings together and organizes

- A:-Part and simulation analysis
 - B:-Documentation and analysis
 - C:-Automation and tool production
 - D:-Common parts, problems and tasks
- Correct Answer:- Option-D

Question58:-The function of shackle with a leaf spring is to

- A:-allow the spring length to change
 - B:-allow pivoting of spring end
 - C:-provide good traction
 - D:-Prevent squeaking sound
- Correct Answer:- Option-A

Question59:-The curve shown in the given figure below is a characteristic of diesel engines. What does the Y-axis represent?



- A:-Efficiency
 - B:-Specific fuel consumption
 - C:-Air-fuel ratio
 - D:-Total fuel consumption
- Correct Answer:- Option-D

Question60:-The equation given below represents

$$m \frac{d^2x}{dt^2} + c \frac{dx}{dt} + kx = 0$$

- A:-free vibrations
 - B:-forced vibrations
 - C:-periodically forced vibrations
 - D:-free vibrations with viscous damping
- Correct Answer:- Option-D

Question61:-A foundation called Naam Foundation has been established by which of the following with an aim to donate money to farmers, who are all affected by drought conditions?

- A:-Anupam Kher
 - B:-Nana Patekar
 - C:-Milkha Singh
 - D:-None of these
- Correct Answer:- Option-B

Question62:-Under the currency swap agreement, which country's central bank has received USD 1.1 billion from the Reserve Bank of India (RBI)?

- A:-Nepal
 - B:-Sri Lanka
 - C:-South Africa
 - D:-Bangladesh
- Correct Answer:- Option-B

Question63:-To maintain a permanent seat in UN Security Council, India hosted the G-4 summit in New York while PM Narendra Modi's visit in September. Which of the following country was not a part of this G-4 summit?

- A:-Germany
 - B:-Russia
 - C:-Brazil
 - D:-Japan
- Correct Answer:- Option-B

Question64:-When is International Day of Peace observed?

- A:-September 19
 - B:-September 21
 - C:-August 21
 - D:-August 25
- Correct Answer:- Option-B

Question65:-In association with which of the following IT firms, Andhra Pradesh government has launched an e-governance tool called e-Pragati to bring all the government services under one roof?

- A:-IBM
- B:-Wipro
- C:-Cognizant
- D:-TCS

Correct Answer:- Option-B

Question66:-A national web portal is launched at New Delhi for promotion of a national apprenticeship scheme for Graduates, Diploma holders and 10+2 pass-outs vocational certificate holders. It is launched by

- A:-Arun Jaitley
- B:-Amit Shah
- C:-Smriti Irani
- D:-None of these

Correct Answer:- Option-C

Question67:-Which Hollywood star has been selected for the Screen Actors Guild's Actors Inspiration Award?

- A:-Mike Myers
- B:-Liam Neesom
- C:-Leonardo DiCaprio
- D:-Brad Pitt

Correct Answer:- Option-C

Question68:-Indian railways has tied up with which of the following to provide free Wi-Fi services across 400 railway stations in the country?

- A:-ISRO
- B:-Microsoft
- C:-Google
- D:-None of these

Correct Answer:- Option-C

Question69:-India inked two Memorandums of Understanding (MOUs) for bilateral cooperation in Tourism and Mekong-Ganga Project with which of the following country?

- A:-Venezuela
- B:-Kazakhstan
- C:-Cambodia
- D:-None of these

Correct Answer:- Option-C

Question70:-Which state government has launched "M-Shiksha-Mitra" mobile app for teacher's which is developed by National Informatics Centre?

- A:-Chattisgarh
- B:-Madhya Pradesh
- C:-Himachal Pradesh
- D:-Haryana

Correct Answer:- Option-B

Question71:-Present ages of Sunil and Anil are in the ratio of 5 : 4 respectively. Three years hence, the ratio of their ages will become 11 : 9 respectively. What is Anil's present age in years?

- A:-27
- B:-40
- C:-36
- D:-24

Correct Answer:- Option-D

Question72:-Complete the series : 14, 28, 20, 40, 32, 64, What number should come next?

- A:-68
- B:-57
- C:-96
- D:-56

Correct Answer:- Option-D

Question73:-An aeroplane covers a certain distance at a speed of 240 kmph in 5 hours. To cover the same distance in $1\frac{2}{3}$ hours, it must travel at a speed of ``

- A:-300 kmph
- B:-360 kmph
- C:-600 kmph
- D:-720 kmph

Correct Answer:- Option-D

Question74:-Rupesh said - "This girl is the wife of the grandson of my mother". How is Rupesh related to the girl?

- A:-Father in law
- B:-Grandfather
- C:-Brother
- D:-Husband

Correct Answer:- Option-A

Question75:-Neeraj walks 5 km towards East and then turns left and walks 6 km. Again he turns right and walks 9 km. Finally he turns to his right and walks 6 km. How far is he from the starting point?

- A:-20
- B:-15
- C:-14
- D:-23

Correct Answer:- Option-C

Question76:-Net Interest income is

- A:-Interest earned on advances
- B:-Interest earned on investments
- C:-Total interest earned on advances and investment
- D:-Difference between interest earned and interest paid

Correct Answer:- Option-D

Question77:-Which of the following is not a type of credit risk?

- A:-Default risk
- B:-Credit spread risk
- C:-Intrinsic risk
- D:-Basis risk

Correct Answer:- Option-B

Question78:-The model that combines five financial ratios using reported accounting information and equity values to produce an objective measure of borrower's financial health is

- A:-Altman's 2 score
- B:-'Credit Metrics'
- C:-Credit Risk +
- D:-None of the above

Correct Answer:- Option-A

Question79:-Growth fund is a mutual fund that

- A:-assures growth in income
- B:-invests in fixed income securities
- C:-gives fixed return
- D:-invests primarily in equities

Correct Answer:- Option-D

Question80:-A fall in interest rates will make prices of Government Securities

- A:-Go down
- B:-Go up
- C:-Remain unchanged
- D:-None of these

Correct Answer:- Option-B

Question81:-BCG in BCG matrix stands for

- A:-Boston Calmette Group
- B:-British Consulting Group
- C:-Boston Corporate Group
- D:-Boston Consulting Group

Correct Answer:- Option-D

Question82:-Which of the following is not part of the micro environment?

- A:-Technology
- B:-Shareholders
- C:-Competitors
- D:-Publics

Correct Answer:- Option-A

Question83:-What does Dog symbolize in BCG matrix?

- A:-Introduction

- B:-Growth
- C:-Maturity
- D:-Decline

Correct Answer:- Option-D

Question84:-Low cost, Differentiation and Focus are examples of _____.

- A:-Corporate strategies
- B:-Operational strategies
- C:-Business strategies
- D:-Functional strategies

Correct Answer:- Option-C

Question85:-_____ is known as "the father of scientific management".

- A:-Fredrick W. Taylor
- B:-Henry Fayol
- C:-Robert Owen
- D:-None of these

Correct Answer:- Option-A

Question86:-Hawthorne Studies is related to which stage of the organisational behaviour evolution?

- A:-Industrial revolution
- B:-Scientific management
- C:-Organisational behaviour
- D:-Human relations movement

Correct Answer:- Option-D

Question87:-The book "The Psychology of Management" was published by

- A:-William Gilbreth
- B:-Henry Fayol
- C:-F.W. Taylor
- D:-Robert Owen

Correct Answer:- Option-A

Question88:-MBTI stands for

- A:-Myers-Briggs Test Indicator
- B:-Myers-Briggs Test Investigator
- C:-Myers-Briggs Type Indicator
- D:-Myers-Briggs Type Investigator

Correct Answer:- Option-C

Question89:-Greater consumer control means that companies must rely more on marketing by _____ than by _____.

- A:-socialization; information
- B:-producing; selling
- C:-interaction; intrusion
- D:-interruption; involvement

Correct Answer:- Option-C

Question90:-Selecting which segments of a population of customers to serve is called _____.

- A:-amanaging the marketing effort
- B:-target marketing
- C:-customization
- D:-positioning

Correct Answer:- Option-B

Question91:-Introducing new products to existing markets is an example of

- A:-conglomerate diversification
- B:-vertical diversification
- C:-horizontal diversification
- D:-concentric diversification

Correct Answer:- Option-C

Question92:-Calculating prices on the basis of what the market will pay is called

- A:-Competitive pricing
- B:-Demand pricing
- C:-Prestige pricing
- D:-Odd-even pricing

Correct Answer:- Option-B

Question93:-The elasticity of demand is greater than unity, when

- A:-Percentage change in demand is equal to the percentage change in price
 - B:-Percentage change in demand is more than the percentage change in price
 - C:-Percentage change in demand is less than the percentage change in price
 - D:-There is change in price
- Correct Answer:- Option-B

Question94:-Whistle Blowing is the situation wherein an employee

- A:-Causes indiscipline in the organization
 - B:-Discloses other employees' illegal immoral or illegitimate activities
 - C:-Discloses the employer's illegal immoral or illegitimate activities
 - D:-All of the above
- Correct Answer:- Option-B

Question95:-Financial Break-even level of EBIT is one at which

- A:-EPS is one
 - B:-EPS is infinite
 - C:-EPS is zero
 - D:-EPS is negative
- Correct Answer:- Option-C

Question96:-Variable which has a strong contingent effect on the independent dependent variable relationship is referred to as

- A:-Extraneous variable
 - B:-Intervening variable
 - C:-Moderating variable
 - D:-None of the above
- Correct Answer:- Option-C

Question97:-SIDBI has been entrusted with the responsibility of

- A:-Providing financial assistance to all sectors
 - B:-Developing medium and large scale industry
 - C:-Providing incentives to medium scale industry
 - D:-Developing and supporting small business
- Correct Answer:- Option-D

Question98:-Euro dollars are

- A:-Currency
 - B:-Deposits
 - C:-Bonds
 - D:-Equity
- Correct Answer:- Option-B

Question99:-The form of learning in which people acquire new behaviours by systematically observing the rewards and punishments given to others is known as

- A:-Law of effect
 - B:-Positive reinforcement
 - C:-Modelling
 - D:-Operant conditioning
- Correct Answer:- Option-D

Question100:-From the following, identify the test which can be used both as parametric and non-parametric?

- A:-'t' test
 - B:-'F' test
 - C:-'Wil-coxon' test
 - D:-Chi-square test
- Correct Answer:- Option-D